#### UNITED STATES DISTRICT COURT

FOR THE WESTERN DISTRICT OF WISCONSIN

WISCONSIN RESOURCES PROTECTION COUNCIL, CENTER FOR BIOLOGICAL DIVERSITY and LAURA GAUGER,

Plaintiffs,

-vs-

Case No. 11-CV-45-BBC

FLAMBEAU MINING COMPANY, INC., Madison, Wisconsin

May 22, 2012 9:03 a.m.

Defendant.

STENOGRAPHIC TRANSCRIPT OF SECOND DAY OF COURT TRIAL MORNING SESSION

HELD BEFORE DISTRICT JUDGE BARBARA B. CRABB,

### **APPEARANCES:**

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	•		2-A-2
1	Continued appearances:		
2	For the Plainti:	ffs: Center for Biological Dive	rsity
3		BY: ATTORNEY MARC FINK 209 East Seventh Street Duluth, Minnesota 55805	
4			
5	For the Defendar	nt: DeWitt Ross & Stevens, S.C BY: ATTORNEYS HARRY VAN C. and SCOTT PALER	
6		Two East Mifflin Street, S Madison, Wisconsin 53703	te. 600
8		Susan George - Paralegal	
	For the State	Wisconsin Department of Ju BY: AAG THOMAS J. DAWSON	stice
9	of Wisconsin:	17 West Main Street	
		Madison, Wisconsin 53703	
11	Also present:	Fred Fox	
12		* * * *	
13	I-N-D-E-X		
14	PLAINTIFFS' WITNESSES EXAMINATION PAGES		<u>PAGES</u>
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THE CLERK: Case Number 11-CV-45-BBC.

Wisconsin Resource Protection Council, et al. v.

Flambeau Mining Company is called for a second day of court trial. May we have the appearances, please.

MS. MCGILLIVAY: Good morning, Your Honor.

Hard to remember that. Pam McGillivray, James Saul,

David Bender from McGillivray, Westerberg & Bender at

counsel's table; Kevin Cassidy from the Lewis & Clark

Law School. Also Christa Westerberg from McGillivray,

Westerberg & Bender, and Dan Mensher from Lewis & Clark

Law School. And Marc Fink from The Center of Biological

Diversity here for plaintiffs Wisconsin Protection

Resources Council, Center for Biological Diversity and

Laura Gauger.

THE COURT: Thank you.

MR. VAN CAMP: Have to drill myself to the seat here. Harry Van Camp appearing on behalf of the defendant Flambeau Mining Company. Also appearing on behalf of the defendant Flambeau Mining Company is Scott Paler; Mr. Fred Fox appearing on behalf of the company,

and we're assisted by Susan George.

THE COURT: Thank you.

MR. DAWSON: Assistant Attorney General Thomas

Dawson representing Craig Roesler and any other

Department of Natural Resources witnesses that may be called.

THE COURT: And Mr. Roesler can come back to the witness stand.

# CRAIG ROESLER, PLAINTIFFS' WITNESS, RESUMES STAND,

THE COURT: Mr. Van Camp.

# CONTINUED CROSS-EXAMINATION

BY MR. VAN CAMP:

- Q Good morning, Mr. Roesler.
- 14 A Morning.

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Α

- Q I have on the screen beside you Exhibit 1028, which is your Surface Water Quality Assessment, page 25 of that report, which is Table 1. You recognize that of course?
- A Yes.

Yes.

Q I believe as we concluded the testimony yesterday we were talking about the point that is indicated ED-14 and we discussed the fact that there is, within the water that drains to that location, a ditch on the east side of Highway 27. Do you recall that testimony?

CRAIG ROESLER - CROSS

```
Now moving down to the south of that slightly
 1
 2
   curved yellow line below ED-14, there's a number MC 3-3.
 3
   Do you see that?
 4
         Yes.
 5
         And the area that -- the yellow area that MC 3-3 is
 6
   in is also bounded on two sides by a road. On the west
 7
    side is Highway 27; correct?
 8
   Α
         Yes.
 9
         And on the south side is another road, Jenson Road.
10
   Do you recognize that?
11
         Yes.
         Okay. And then below the MC 3-3, below the Jenson
12
13
   Road, the yellow line indicating Jenson Road, there's
14
   sort of a quarter circle area, and C 1-5, at least the
    square where C 1-5 is, is located in that and I
15
16
   understand that C 1-5 is pointing to something else.
   But that drainage area also includes a ditch along
17
   Highway 27; correct?
18
19
   Α
         Yes.
20
         And also a ditch along the south side of Jenson
21
   Road; correct?
22
   Α
         Yes.
23
         Okay. Then to the west of the area that we just
24
   discussed there is a sort of a U-shaped drainage area
25
                            Do you see that?
   that has a EB-6 in it.
                     CRAIG ROESLER - CROSS
```

2 - A - 6

```
1
    Α
         Yes.
 2
         That would also include a drainage ditch along
 3
    Highway 27 as part of that drainage; correct?
 4
         Yes.
 5
         And that would be on the western side of that?
    Q
 6
    Α
         Yes.
 7
         Then if we look at the sort of semi, I guess we'll
 8
    call it triangular shape in which EB-6 rests and SEB-11
 9
    -- do you see the yellow area that I'm referring to?
10
    Α
         I think so, yes.
         It concludes at a point in the southwest corner
11
    where we have MB-16, FB-9, SC-7, FA-8. Do you see
12
13
    those?
14
         Yes.
    Α
15
         Those -- that drainage area includes a drainage
16
    ditch on the south side of Copper Park Lane and a bit of
    a drainage ditch along Highway 27; correct?
17
        Yes, it does.
18
    Α
19
         Then if we go above that, there is a small
20
    rectangular shape with a green dot in it that is pointed
21
   to by a rectangle that says CP-4. Do you see that small
22
    rectangular shape?
23
         Yes.
24
         That small rectangular shape drains an area that
25
    includes a ditch along Highway 27 for a short distance;
                     CRAIG ROESLER - CROSS
```

```
correct?
 1
 2
   Α
         Yes.
 3
         And it also drains an area with a ditch along the
 4
   north side of Copper Park Lane; correct?
 5
         Yes.
   Α
 6
         And then there is a small circular area. And above
 7
   that and to the right of that are ditches along Highway
 8
    27 and on the south side of Copper Park Lane; correct?
 9
         I'm not sure what small circular area you're
10
   referring to.
         Okay. There's a point on it that is indicated in a
11
12
   white rectangle SEB-11. It's not really a circle, it's
13
   sort of a tear-dropped shape.
14
   Α
        Yes.
15
         Do you see that?
16
   Α
         Yes.
         And above that, the yellow line, the sort of
17
    straight yellow line is Copper Park Lane; correct?
18
19
    Α
         Yes.
20
         And there would be a drainage ditch on the south
   side of Copper Park Lane?
21
22
   Α
         Yes.
23
         And then to the right or to the east of that
24
   tear-dropped shape there is a drainage ditch along
25
   Highway 27 that would drain into that area as well.
                     CRAIG ROESLER - CROSS
```

2 - A - 8

```
Drain into what area?
 1
   Α
 2
         Well, the area that's sort of around that
 3
   tear-dropped shape.
 4
         Yes.
 5
         Now, you know that, in fact, highways and parking
 6
    lots can be sources for runoff of copper; correct?
 7
    Α
         Yes.
 8
         In fact, in the preparation of your Surface Water
 9
   Quality Assessment, one of the individuals that you
10
   identified as a contributor was a fellow by the name of
   Roger Bannerman; correct?
11
12
   Α
        Yes.
13
        Who is Roger Bannerman?
14
        He's a DNR employee in Madison that's done a lot of
   work looking at water quality of urban runoff
15
16
   especially.
         Okay. Now I'm going to show you a document that's
17
18
    on your screen that has been marked as Defendant's
19
   Exhibit 579. Do you see that?
20
    Α
         Yes.
21
         And it's an email back and forth between you and
22
   Mr. Bannerman; correct?
23
         Yes.
24
         And the earliest email is the lower one, which is
25
    an email from you to Mr. Bannerman. Would you read to
                     CRAIG ROESLER - CROSS
```

the Court what you asked in that email? 1 2 "I'm looking at some runoff data for copper and 3 zinc concentrations at the reclaimed Flambeau Mine site 4 near Ladysmith. Some sample sites are influenced by 5 highway or parking lot runoff. Does runoff from these 6 surfaces typically contain copper and zinc at chronic or 7 acute toxicity concentrations?" 8 And then the email above that is the response you 9 received from Mr. Bannerman; correct? 10 Α Yes. Would you read what he said to the Court. 11 12 MR. SAUL: Objection. Hearsay. THE COURT: Sustained. 13 BY MR. VAN CAMP: 14 15 Was the email that you received information that 16 was obtained by you for use in your Surface Water 17 Quality Assessment? This email? Yes. 18 19 And you included that information in your 20 assessment; correct? 21 Yes. Α 22 Ask you to read what Mr. Bannerman told you. 23 It says, "Hi Craig. Yes, the levels of total 24 recoverable zinc and copper in highway and parking lot

runoff can exceed the chronic and acute toxicity

CRAIG ROESLER - CROSS

25

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criteria. See page 19 and 252 of attached reports. The
 1
 2
   more busy the highway or parking lot, the higher the
 3
             The highways are a much more important source
    levels.
 4
    than the parking lots. I hope this helps. Take care.
 5
   Roger B."
             MR. VAN CAMP: Move for admission of 579.
 6
             THE COURT: Any objection?
 8
             MR. SAUL: No objection.
 9
             THE COURT: Received.
10
             MR. VAN CAMP: I have no further questions for
    this witness. Thank you very much.
11
             THE COURT: Mr. Saul, anything further?
12
13
             MR. SAUL: No questions, Your Honor.
14
             THE COURT: You may step down. If I were you,
15
    I would get out of here fast.
16
         (Witness excused at 9:14 a.m.)
             THE COURT: Is Mr. Roesler free to leave?
17
             MS. MCGILLIVAY: Yes, he is, Your Honor.
18
19
             THE WITNESS: Permanently?
20
             MR. VAN CAMP: Forever.
            MR. CASSIDY: Your Honor, the plaintiffs next
21
22
    witness is Jana Murphy. We could call her to the stand.
23
   And if it's okay with Your Honor, I'm going to be using
24
   the monitor and the ELMO, and so I think it would be
25
   more efficient if I wasn't reaching over if I could
                    CRAIG ROESLER - CROSS
```

examine the witness from the podium. 1 2 THE COURT: Absolutely. JANA MURPHY, PLAINTIFFS' WITNESS, SWORN, MR. CASSIDY: Thank you. Good morning, Your 5 Honor. As a preliminary matter for the record, the 6 plaintiffs are calling Ms. Murphy in our case-in-chief 7 as an adverse witness. She is -- expected testimony 8 will be that she is a -- has been an employee of Flambeau Mining Company for 20 years; still an employee 9 10 there; has -- expects to continue to be an employee there. 11 12 THE COURT: Is there any objection to that, Mr. Van Camp? 13 14 MR. VAN CAMP: No. MR. CASSIDY: Thank you, Your Honor. And I 15 16 assume -- well, I should ask. Under 611, may I lead the witness as an adverse witness? 17 18 THE COURT: You may. 19 MR. CASSIDY: Thank you. 20 ADVERSE EXAMINATION 21 BY MR. CASSIDY: 22 We haven't met. I should introduce myself. Good 23 morning, Ms. Murphy. My name is Kevin Cassidy. I'm an

attorney for the plaintiffs in this case. Where do you

JANA MURPHY - ADVERSE

work?

24

25

```
I work in Ladysmith, Wisconsin on the reclaim mine
 1
   Α
 2
   site.
         And what reclaim mine site are you speaking of?
 3
 4
         It's the Flambeau Mining Company's reclaim mine
 5
   site.
 6
    Q
         What's your title?
 7
         Environmental and Reclamation Manager.
 8
         How long have you worked in that capacity for the
 9
   Flambeau Mining Company?
10
         I've worked for the Flambeau Mining Company going
   on 20 years, and I would say since about 1998 I've been
11
12
   the Environmental and Reclamation Manager.
13
        And before that what was your job title?
14
        Title was Environmental Supervisor.
15
         So your job has always involved environmental
16
   matters at the job site?
17
   Α
         Yes.
         Are there any other Flambeau Mine employees in
18
   Wisconsin other than you?
19
20
    Α
         No.
21
         And how long have you been the only Flambeau Mine
22
   employee in Wisconsin?
         Oh, I would say approximately ten years.
23
24
         I'm going to ask you a few questions about your
25
    education and background. Do you have any -- do you
```

JANA MURPHY - ADVERSE

```
hold any college degrees?
 1
 2
         I have a bachelor's in biology.
    Α
 3
         From what university?
    Q
 4
         It's from Mt. Senario College.
    Α
 5
         And what year did you receive that degree?
    Q
 6
    Α
         1986.
 7
         And do you have another degree?
 8
         I have a master's in environmental and public
 9
   health.
10
         And from what university?
         University of Wisconsin-Eau Claire.
11
12
         And what year did you receive that degree?
         '93. 1993.
13
    Α
14
         Did you do a master's thesis?
15
         No.
    Α
16
         As the environmental supervisor -- so I'm going to
   go back before you became the Environmental and
17
    Reclamation Manager. As an environmental supervisor,
18
    when you were first hired, what were your duties?
19
20
         My duties were to observe the remaining
21
    construction, work with -- during a transition period to
22
    come up to speed with the permits, and continue the
23
    environmental management implementing systems permit
24
    compliance reporting.
25
             THE COURT: So can I get this straight, when
                     JANA MURPHY - ADVERSE
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you were fired hired, what was the state of the mine at
 1
 2
    that point?
             THE WITNESS: It was under construction.
 3
             THE COURT: So you were there from '94/'95?
 5
             THE WITNESS: '92.
 6
             THE COURT: '92?
 7
    BY MR. CASSIDY:
 8
         And when you say under construction, what does that
 9
   mean?
10
         That means it hadn't begun mining yet.
    Α
         Now when did it begin mining?
11
12
    Α
         Mining phase began in 1993.
13
    Q
         And how long did that last?
         That lasted until summer of '97.
14
    Α
15
         So during all of that you were the environmental
16
    supervisor there?
17
    Α
         Yes.
         And what were your day-to-day jobs during that
18
    time?
19
20
         During that time I would collect or oversee the
21
    collection of samples; coordinate work on reports with
22
    the consultants; reviewing reports and reporting legal
23
   requirements for the DNR; attend meetings; discussing
24
    any action that needed to be taken on the site.
25
         So you mentioned sample collection and sample
                     JANA MURPHY - ADVERSE
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```
monitoring. What type of samples were you working with?
 1
 2
         We had the Flambeau River and groundwater and air
 3
   monitoring.
 4
         So surface water samples?
 5
   Α
         Yes.
 6
    Q
         Groundwater samples?
 7
    Α
         Yes.
 8
    Q
         Air samples?
 9
    Α
         Yes.
10
         Any other kind of samples?
    Q
         Biota was collected from the river by consultants.
11
12
         What do you mean by biota?
13
   Α
         Crayfish; fish; macroinvertebrates were identified,
   collected and identified.
14
15
         Okay. And then how did your job duties change when
16
   you became the Environmental Reclamation Manager?
         Increased responsibility due to the reduction in
17
18
   the number of managers on the site. Also we had moved
   past the mining phase and into the reclamation phase and
19
20
    closure.
21
         And so what did that mean for you? What -- you
22
   said increased responsibility. Were you doing other
   tasks or were you just supervising more?
23
24
         I would say that it involved more time with the
25
    community relations, public relations, and as far as a
                     JANA MURPHY - ADVERSE
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change in the type of management of consultants to
 1
 2
    ecological consultants, more than construction and
 3
   mining.
 4
         Did the duties you had with regard to water
 5
    sampling and monitoring and analysis continue as you
   were the Environmental Reclamation Manager?
 6
 7
         Yes.
    Α
 8
         And do they continue up until today?
 9
    Α
         Yes.
10
         Okay. So essentially you've been collecting
   environmental monitoring data at the mine since 1992?
11
12
         Or overseeing someone who did it.
         Okay. Have you collected samples at something
13
   called the biofilter?
14
15
         Yes.
   Α
16
         And just so I know, there may be more than one
   biofilter on the site; is that right?
17
        Yes. At one time it referred to one other
18
   biofilter.
19
20
         Just so we are talking about the same biofilter,
21
    I'm going to put an exhibit on your screen.
                                                  This is
22
   Exhibit JE 1024. Do you see that number?
         Um-hmm, yes.
23
24
         And in this picture do you see a biofilter that's
25
   marked .9 acre biofilter basin?
                     JANA MURPHY - ADVERSE
```

```
I see the approximate east half of it.
 1
   Α
 2
         Okay. So as we go forward today, that's the
 3
   biofilter I'm going to be asking you questions about,
 4
   okay?
 5
         Yes.
   Α
 6
         And so the question was have you collected samples
 7
   at this biofilter?
 8
   Α
         Yes.
 9
         And what is the biofilter?
10
         The biofilter is a structure that was put in place
   as part of the stormwater management system for the
11
12
   Industrial Outlot.
13
         What does it do?
14
         It holds water and allows particulates to settle
15
   out.
16
         And when you say particulates, what do you mean?
         It could be whatever is coming in that's suspended.
17
   It could be runoff from the parking lot. It could be
18
   runoff from roofs. It could be just runoff from the
19
20
    site and whatever solids that were carried with it.
21
         So stormwater is designed from the site, at least
22
   for part of the site, to empty into this biofilter?
23
         Yes.
24
         And then the biofilter has a -- is a settling
25
   process, for lack of a technical term, a settling
                     JANA MURPHY - ADVERSE
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```
process by which particulates settle out; is that
 1
 2
    correct?
 3
         Yes.
    Α
 4
         And the particulates could be metals?
 5
         Yes.
    Α
 6
         Could be copper?
    Q
 7
    Α
         Yes.
 8
         Zinc?
    Q
 9
    Α
         Yes.
10
         Other metals?
    Q
        Yes.
11
    Α
         Could particulates be other things?
12
13
    Α
         Yes.
14
         Okay. But that's how the biofilter was designed to
15
    work; is that right?
16
         In part, yes. The primary design, yes.
         Okay. And you said you've been able to take --
17
    you've taken samples from the biofilter itself?
18
19
    Α
         Yes.
20
         And have you taken samples from the biofilter
   outlet?
21
22
    Α
         Yes.
23
         And just so we make sure we're talking about the
24
    same thing, if I -- I'm going to circle what I
25
    understand to be the biofilter outlet on this and you
                     JANA MURPHY - ADVERSE
```

```
can tell me if I've got it right, okay? (Indicating)
 1
 2
        Yes.
   Α
 3
        Is it generally in that area where I circled which
 4
   is the northeastern corner of the biofilter that we see
 5
   in this picture?
 6
   Α
        Yes.
 7
        Have you ever seen water discharging through that
 8
   biofilter outlet?
        I've seen water flowing in an easterly direction.
 9
   Α
10
        Okay. So you've seen water discharging through the
   biofilter outlet?
11
12
        I assume. Most times the grass is so thick that I
13
   can't see where it goes beyond the rock area.
       Well, I'm not -- I'm actually not asking you where
14
   it goes yet. I'm just asking you if you saw a discharge
16
   out of the outlet.
        I have a hard time telling where the actual edge of
17
   the outlet is because of the naturalization, so...
18
        Well, when you say naturalization, you mean growth?
19
20
   Α
       Yes.
21
        Okay. But part of your job was to take samples at
22
   that location.
23
   Α
        Right.
24
        Okay.
    Q
25
        Yes.
   Α
                    JANA MURPHY - ADVERSE
```

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And you have -- we're going to look at some
sampling data later that says BO, you know, and a
certain number -- certain numbers, and those numbers,
they're indicative of a sample point at that location.
    Yes.
Α
     So when you went to take a sample point there, you
knew where the biofilter outlet was.
Α
    Yes.
     And when you were there, you were taking samples of
water.
    Yes.
Α
    Of runoff.
Q
Α
    Yes.
    So the question is have you seen water discharging
out of the biofilter outlet?
     Yeah. I have seen water flowing east and out of
the biofilter outlet.
     Okay. You mentioned flowing east. And is that the
direction that the arrow coming out of the biofilter
outlet that I just circled, again that you just
identified as the outlet, is that the direction that
arrow is pointing?
         THE COURT: How can you tell?
         THE WITNESS: I have a hard time seeing it.
blends in.
                JANA MURPHY - ADVERSE
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MR. CASSIDY: May I approach the witness, Your
 2
   Honor?
             THE COURT: Certainly.
             THE WITNESS: I can see it now, yes.
 5
   BY MR. CASSIDY:
 6
        Okay. So that is the direction you're referring
 7
   to, the water flowed east?
 8
   Α
        Generally, yes.
 9
        In the same direction as this arrow.
   Q
10
   Α
        Generally.
11
        Okay. Now where -- did you ever see the water come
   out of the biofilter and flow north?
12
       I didn't look that closely.
13
   Α
       So you didn't. Did you ever see it flow north?
14
   Q
15
   Α
        No.
16
        Did you ever see it flow back into the biofilter,
   flow west?
17
18
   Α
        No.
19
        Okay. And at the outlet, right at the outlet where
20
   you were taking samples, did you ever see it flow
   directly south?
21
22
   Α
        No.
        Okay. So all the observations you had were it was
23
   flowing east out of the outlet?
25
        Yes.
   Α
                    JANA MURPHY - ADVERSE
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```
Where does the water flowing out of the biofilter
 1
    Q
 2
   go?
 3
         It goes into -- actually it depends upon the amount
 4
   of flow, which isn't quantified. I know it has the
 5
   possibility of going into the adjacent wetland.
 6
        So if I asked you where the water flowing out of
 7
   the biofilter goes, and assuming there's enough flow,
 8
   okay? Let's put aside trickles for a second. Assuming
   there's enough flow coming out of the biofilter that you
 9
10
   see it discharging, what is your understanding of where
11
    it goes?
12
        Generally it flows to the east towards the wetland.
13
        Okay. I'm going to have you take a look at an
14
   exhibit; put it on your screen. Can you see Exhibit JE
   1008?
15
16
   Α
        Yes.
17
        And do you see your name at the top of that
   exhibit?
18
19
    Α
        Yes.
20
        And is this, and I'll turn -- this is a multi-page
21
   exhibit, so I'm going to show you the second page and
22
   then the third page. And do you see -- do you generally
23
   recognize this as an email exchange?
24
        Yes.
   Α
25
         And it's between you and somebody named Dale Lueck,
                    JANA MURPHY - ADVERSE
```

```
if I'm pronouncing his name; correct?
 1
 2
        Yes. I don't remember what the first page showed,
 3
    so...
 4
         I'm just asking if you generally recognize this as
 5
   an email exchange between you and Dale Lueck.
        I see Dale Lueck down at that location and I didn't
 6
 7
   get a chance to see -- I'm assuming down on the first
   page it's Dale Lueck as well?
 8
 9
        We'll go back to that. Here is the third page.
10
   this is generally, you understand email exchanges, when
   you print them out, to start at the bottom and move
11
   their way up?
12
13
   Α
        Yes.
14
   Q
        Okay.
             MR. CASSIDY: Your Honor, we move 1008 into
15
16
   evidence.
17
             MR. VAN CAMP: I don't believe there's a proper
   foundation for it.
18
19
             THE COURT: Not yet.
20
   BY MR. CASSIDY:
21
         Did you -- do you send emails during the course of
22
   your business?
23
         Yes.
24
        And was this email sent while you were an employee
    of the Flambeau Mine Company?
                     JANA MURPHY - ADVERSE
```

```
I haven't had a chance to review it.
 1
   Α
 2
             THE COURT: Why don't you show her the
 3
    original. Not the original...
             MR. CASSIDY: May I approach?
 5
             THE COURT: Show her the paper copy.
 6
             MR. CASSIDY: Thank you, Your Honor.
 7
        You can hold on to that and look at it. So we'll
 8
    start at the first page at the top. Says Jana Murphy,
 9
   Flambeau Mining Company. So this is a work email for
10
   you; is that right?
11
        Yes.
        And it has the email that you used to -- for your
12
   work purposes?
13
14
   Α
        Yes.
15
         So this would have been done during the course of
16
   your employment at Flambeau Mine Company?
17
   Α
         Yes.
        And the subject matter of this email, if you've had
18
   a chance to look at it, there are certain questions
19
20
   about the biofilter, Stream C, and the Flambeau River.
21
   Those are all within the purview of your environmental
22
   duties at Flambeau Mine Company; correct?
23
        Yes.
             MR. CASSIDY: Your Honor, we'd move this in as
24
25
   a not hearsay admission.
                              801-D2.
                    JANA MURPHY - ADVERSE
```

```
MR. VAN CAMP: No objection.
             THE COURT: Received.
 3
            MR. CASSIDY: Thank you.
 4
   BY MR. CASSIDY:
 5
        So, the question I asked you earlier was where does
 6
   water flowing from the biofilter go.
 7
        Yes.
    Α
 8
        And you were asked that same question during the
 9
   course of this email exchange or the question was asked
10
   of you; is that right?
        Yes.
11
   Α
        Okay. And do you remember who Dale Lueck is?
12
      I believe he's from Minnesota.
13
   Α
14
        And do you remember why Mr. Lueck was asking you
15
   this question?
16
        It may be related to Kennecott exploration work
17
   over there.
18
        And did you endeavor to answer his questions in
   this email?
19
20
   Α
       Yes.
        And if we -- I'm going to direct your attention to
21
22
   the first page. If we go down to here, I'm circling on
23
   the screen the same question I just asked you: "Where
24
   does the water flowing out of the biofilter go?" Do you
25
    see that?
                    JANA MURPHY - ADVERSE
```

1 Α Yes. 2 And what was your answer on October 5th, 2006? 3 And you want me to read it? Α 4 Please. 5 "Water flowing out of the biofilter flows into a 6 small intermittent stream designated Stream C. Flambeau 7 has conducted biological assessments of Stream C during 8 both the spring and fall. Due to its intermittent 9 nature of the stream, it has poor aquatic habitat and is 10 very limited in biota in all aspects, including aquatic vegetation, macroinvertebrates and fish populations." 11 12 Thank you. Now, so 2006 when you were asked that question, you didn't say it flowed to a wetland, you 13 answered the question, "Water flowing out of the 14 15 biofilter flows into a small intermittent stream 16 designated Stream C." 17 That's right, yes. And if we go back to 1024, that diagram we just 18 looked at, do you see a blue line on there that is east 19 20 of the biofilter outlet that has been labeled or that has been called Intermittent Stream C? 21 22 I see the blue line, yes. 23 And you understand that's been referred to by 24 Flambeau Mine Company, by yourself, and by Flambeau's 25 consultants as Intermittent Stream C; right?

JANA MURPHY - ADVERSE

```
A That general area, yes.

Q Okay. And so when you said water flowing out of the biofilter flows into a small intermittent stream designated Stream C, that's what you were referring to; correct?

A I was referring to that area.

Q You were referring to the area where the blue line comes down just east of the biofilter; correct?
```

A I never considered that Stream C. We refer to it because of the watershed and the flow pattern, but -- potential flow pattern.

Q Okay. Well, if you referred to it as Stream C because of the watershed, what do you mean by that?

A That's a land area that has the potential to runoff that would reach Stream C.

Q So you referred to this area as Intermittent Stream C why?

A Because it's part of the watershed of Stream C.

Q Okay. And which would -- so it would flow downstream into what? Into Stream C below Copper Park Lane; is that correct?

A Yes. It flows down through the wetland and to Copper Park, the stream under Copper Park Lane.

Q Okay. And that would be south, flowing south; right?

JANA MURPHY - ADVERSE

Yes, if there's sufficient water. 1 Α 2 I'm going to put the Exhibit 1008 back on the 3 screen for you. THE COURT: Ms. Murphy -- oh, somebody already 5 did. 6 MR. CASSIDY: I did it, Your Honor. I cleared 7 it. 8 THE COURT: Thank you. 9 BY MR. CASSIDY: 10 Now I want to look at Question 3. That's the next question down. Another question that was posed to you 11 12 in this email exchange on October 5, 2006. And the 13 question reads: "What are the concentrations of copper 14 in water flowing from the biofilter to Stream C?" And if you could just read the first sentence of that 15 16 response for us. "Copper concentrations in Stream C upstream of the 17 18 biofilter (background concentrations) have been naturally higher than what is measured in the water 19 20 flowing out of the biofilter into Stream C." So in that sentence you refer to something called 21 22 Stream C upstream of the biofilter. What are we talking 23 about there? 24 We're talking about again the watershed that's 25 upgradient that would be -- we have a sampling point JANA MURPHY - ADVERSE

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along Highway 27. And you call that Stream C in this response. It's part of the Stream C watershed. Just so I know what part of the Stream C watershed it is, I put Exhibit 1024 back up on the monitor and if the -- I'll circle the biofilter outlet. Do you see my circle there at the top northeast corner of the biofilter? Α Yes. And so when you're referring to Stream C upstream of the biofilter, are you referring to this blue line that runs, on this photograph, to the -- well, let's make it the way the water flows, okay? Just so we're clear. Upstream means the water would be flowing down towards the biofilter; correct? Right, if there's sufficient water. Okay. Let's just -- let's just assume there's

Q Okay. Let's just -- let's just assume there's sufficient water for the questions, but I understand your qualification. But if the water is flowing in the stream and it's flowing from upstream, it would be coming from the eastern part of this photograph, flowing along generally where the blue line is and then flowing through what are referred to as railroad culverts and then again intersecting down near the outlet of the biofilter. Is that your understanding?

JANA MURPHY - ADVERSE

MR. VAN CAMP: Object to the form of the 2 question. 3 Is that your understanding? MR. VAN CAMP: There's a discussion about an 4 5 intersecting. It's a compound question, and --THE COURT: Why don't you -- if that's your 6 7 objection, break it down into smaller bites. 8 MR. CASSIDY: I will, Your Honor. Okay. 9 BY MR. CASSIDY: 10 Just to -- we're talking about your answer to Question 3 where you say "copper concentrations in 11 12 Stream C upstream of the biofilter." And what I'm 13 trying to get an understanding of is what you define as 14 upstream of the biofilter. 15 So maybe the best way to do this is to go ahead and 16 have you mark it. I'm going to -- you can mark it on your screen if you push hard enough. Why don't you 17 circle biofilter outlet. 18 19 (Witness complies) 20 Okay. You've circled that in blue. Thank you. 21 And then please tell me what you were referring to when 22 you were talking about copper concentrations in Stream C 23 upstream of the biofilter on this photograph. 24 It's actually north of this point. That isn't an 25 accurate representation that I have there. It would be

JANA MURPHY - ADVERSE

```
more like the point is up higher. It's a sample point
 1
 2
   along the highway ditch.
 3
         Okay. So those concentrations of copper are
 4
   actually off this picture further up the watershed; is
 5
   that right?
 6
   Α
        Yes.
 7
        Okay. And when you say they are -- they are
 8
   naturally higher than what was measured in water flowing
   out of the biofilter into Stream C, where -- how do
 9
10
   those two things connect?
        The elevation differences show there's a potential
11
12
   for water to flow generally from north to south and in
   an easterly direction.
13
14
        Okay. Can you go ahead and show us how they
   connect with marking the map, please.
16
         I have -- I have seen -- I have not -- it's -- I
17
   have not seen flows in certain areas, so I can only
    speak to that which I have actually seen.
18
        That's fine.
19
20
        So I have seen flow at this location (indicating),
   and in that spot it appeared to be going west.
21
22
             THE COURT: When you say this location, you're
23
   talking about the northeast corner essentially of the
24
   photograph?
25
            THE WITNESS: Yeah.
```

JANA MURPHY - ADVERSE

```
THE COURT: Near Highway 27.
 2
             THE WITNESS: It's the outlet of the highway
 3
    culvert on the west side of the highway. I've --
 4
   BY MR. CASSIDY:
 5
         I'm sorry. Go ahead.
 6
         I've also observed flow at these culverts going
 7
    into the culverts.
 8
    Q
        Okay. And --
 9
             THE COURT: For the record, you've drawn a line
10
   essentially straight west from the first dot that you
   put in?
11
             THE WITNESS: Yes.
12
13
             MR. CASSIDY: So, Your Honor, just -- I do want
14
   to clarify.
        Have you -- you've drawn two dots, and the flow, as
15
16
   you understand it, would go between those two dots?
         I would assume so.
17
         Okay. And then where would the flow go after the
18
    second dot you drew at the eastern side of the railroad
19
20
   culverts?
        It would exit the culverts.
21
22
         Okay. Can you draw a dot where it would exit the
23
   culverts?
24
        (Witness complies)
   Α
25
        And from there, where would the flow --
                    JANA MURPHY - ADVERSE
```

THE COURT: Would you describe for the record 2 where she has indicated that --3 MR. CASSIDY: I'm sorry, Your Honor. 4 So Ms. Murphy, you drew a dot -- you drew your 5 third dot there at the western side of what you identified as the railroad culverts, which are 6 7 delineated as two light blue solid lines on this map; is 8 that right? 9 Α Yes. 10 Now from the exit of the railroad culverts, where would the water flow then? 11 12 What I've observed is at a vantage point and I 13 would see flow from the culverts in this general kind of 14 fan. (Indicating) And I have also stood in the area of the farmer's culvert, and looking to the north, seen a 15 16 sheetflow across the wetland going south. Okay. So you've drawn a couple more dots here, so 17 I want to -- for the record, you drew some dots below 18 your third dot underneath the railroad culvert where you 19 20 said you saw the water come out of there and flow. And 21 it's flowing south; right? 22 Α Yes. 23 And then you saw -- you drew another dot at the 24 very southern end of this photograph where what you call 25 was the farmer's culvert; is that right?

JANA MURPHY - ADVERSE

```
1
   Α
         Yes.
 2
         And that dot is now -- or at the very southern part
 3
   of the biofilter; correct?
 4
         Outside the biofilter.
 5
         To the east.
    Q
 6
   Α
         To the east.
 7
         Thank you. And so the flow has now come down from
 8
   Highway 27 through the railroad culverts, exited the
 9
   railroad culverts, passed by the biofilter outlet, and
10
   arrived down at the farmer's culvert at the very bottom
    of this picture; is that correct?
11
12
             MR. VAN CAMP: Object to the form of the
    question. Mischaracterizes the testimony.
13
14
             MR. CASSIDY: Do you agree with that, with the
15
    summary I just gave?
16
             MR. VAN CAMP: I'll object.
             THE COURT: Overruled.
17
             THE WITNESS: It isn't in a single day that I
18
    would have visited all of those spots.
19
20
   BY MR. CASSIDY:
21
        I understand that. That's not the question.
22
   question was the dots you drew on this map represent
23
   your understanding of the direction of the flow of the
24
   water.
25
            MR. VAN CAMP: Object to the form of the
                     JANA MURPHY - ADVERSE
```

```
question.
 1
 2
             THE COURT: Overruled.
             THE WITNESS: Based upon elevation differences,
 3
 4
   yes, but I haven't observed that.
 5
             THE COURT: Why don't you take a photograph of
 6
   that.
             MR. CASSIDY: I intended to do that, Your
 8
   Honor. Thank you. Can we do that? Actually, no, I
 9
   cannot zoom out. So I do want to continue it down the
10
   stream there.
11
             THE COURT: That's fine.
   BY MR. CASSIDY:
12
        Would you also -- while the printer is warming up,
13
14
   would you also agree with me, Ms. Murphy, that between
15
   the dots that you just drew there is generally a blue
16
   line that connects them all except for where the
   railroad culverts are?
17
18
   Α
        Yes.
        So that blue line --
19
20
             MR. CASSIDY: Do you have a sticker? Your
21
   Honor, we move Exhibit 88, the printed-out exhibit into
22
   evidence.
23
             THE COURT: Any objection?
24
             MR. VAN CAMP: No objection.
25
             THE COURT:
                        Received.
                     JANA MURPHY - ADVERSE
```

```
BY MR. CASSIDY:
 1
 2
        So that blue line that's depicted in between your
 3
   blue dots is generally your understanding of the
 4
   direction of the water flow in this picture?
 5
        Potential flow, yes.
 6
        And in fact, you've seen it flowing at certain
 7
   areas along there on certain times?
 8
   Α
        Yes.
 9
         Okay. So it's more than just potential, you've
10
   actually seen it flowing.
        Yes. At those locations, yes.
11
         I'm going to just slide the picture up slightly and
12
13
   if -- just so you can reorient us since I've moved the
14
   picture, this is the same Exhibit 1024. Can you again
   mark on there the biofilter outlet?
15
16
        (Witness complies)
        And can you draw a dot at the northern end of the
17
   stub road culvert, which is what you drew on your last
18
   picture in Exhibit 88?
19
20
        (Witness complies)
21
         So now if you can tell us where the water goes next
22
   from your dot at the stub road culvert?
23
         The water would go to the south.
24
        And that's in the direction of the blue arrow
   that's pointing?
                    JANA MURPHY - ADVERSE
```

```
Yes.
 1
    Α
 2
         And have you observed that?
 3
         I've observed a portion of that from Copper Park
 4
    Lane and the southern more part of the blue line.
 5
         Have you -- have you ever been out on the stub
 6
    road?
 7
         Yes.
    Α
 8
         And have you observed flow there?
 9
         I observed flow coming into the culvert. I have
    Α
10
   memory of that.
11
    Q
         Okay.
         And I didn't observe what was coming out, so --
12
        So how wide is the stub road?
13
14
    Α
        Twenty-five feet.
15
         So when you were out there on the day you remember
16
    it, you remember seeing water coming --
17
    Α
         Yeah.
         -- into the culvert, but did you look to see if it
18
19
    was coming out?
20
    Α
        Not at that location.
21
         Did you assume where it was going?
    Q
22
    Α
         Yes.
         On the other side of the culvert?
23
24
         It was going through -- yeah, I assumed it was
    going through the culvert.
                     JANA MURPHY - ADVERSE
```

Q And you put another small dot there about -- on the north end of the stub road culvert where you said you observed flow, and so then when -- and then you put a blue dot or mark down on Copper Park Lane where you said you've observed flow; is that correct?

A I have been on Copper Park Lane looking to the north and I've seen flow in the -- north of Copper Park Lane, but in the lower south part of the blue line.

- Q And that flow would be coming toward you; right?
- A It would be flowing south towards the culvert under Copper Park Lane.
- Q And then once it gets to the culvert under Copper Park Lane, where does it go?
- A It exits the culvert and enters a riprap channel and carries on into the woodland and Stream C.
- 16 Q The riprap channel is Stream C?
- 17 A Yes.

- Q Now -- and again, just to go full circle on this, if you go from the biofilter outlet down to the dots that you've drawn on this figure at the stub road culvert, at Copper Park Lane, and south of Copper Park Lane, except where there are culverts indicated, there is generally a blue line; is that right?
- A I see the blue line, yes.
- Q And is that the general -- that goes in between JANA MURPHY ADVERSE

```
your dots; correct?
 1
 2
   Α
        Yes.
 3
        And in fact, if you were -- if you were asked --
 4
   can you put -- if you were asked to connect your dots
 5
    from the biofilter outlet down to south of Copper Park
 6
   Lane, it would be generally along that blue line?
             MR. VAN CAMP: Objection. Relevance.
 8
             THE COURT: Sustained.
 9
   BY MR. CASSIDY:
10
        Can you connect your dots on this picture?
             MR. VAN CAMP: Objection. Relevance.
11
             THE COURT: Sustained.
12
13
             MR. CASSIDY: Is the -- actually we'll mark
14
   this. Can we print this?
   BY MR. CASSIDY:
15
16
        So this line of questioning, Ms. Murphy, started
   back with Exhibit 1008. I'm going to show you that
17
   again. I think you have that in front of you. So we're
18
   looking back at Exhibit 1008 and now I'm going to take
19
20
   you down to Question 4. Do you see Question 4?
21
        I see Question 4.
   Α
22
        And that question asks you: "At the time in 2006
23
   is the biofilter polluting Stream C and the Flambeau
   River? And can you read your answer to that question.
24
25
        The short answer is "No. The data shows
                    JANA MURPHY - ADVERSE
```

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2-A-40

conclusively that the concentration of copper in the water coming out of the biofilter is equivalent or better than background conditions. Thus it is concluded that the biofilter is doing its job and not polluting the Flambeau River or Stream C." So when you said conclude the biofilter is doing its job, what did you mean by that? Α Reducing any potential or potential contaminates that come into the biofilter. And exit the biofilter? Yes. Okay. So if the biofilter wasn't doing its job correctly, would there be an opportunity for more pollutants to exit the biofilter? I don't know. Α Is that -- so when the biofilter was designed, you were there; correct? Α Yes. And so you were there when it was built and constructed? Yes, I was there. Α And essentially you testified already, but the biofilter was designed to filter out pollutants. Yes. Α And to keep those pollutants from reaching where?

```
As part of the best management practices, the
 1
   Α
 2
   runoff from the Industrial Outlot was routed through
 3
   that location to settle out particulates so that they
 4
   wouldn't exit the biofilter.
 5
        And so -- and you were concerned about them exiting
 6
   the biofilter and going where?
 7
        Into the adjacent environment.
 8
        And what was the adjacent environment?
    Q
 9
        Stream C watershed.
   Α
10
        Okay. And just -- I want to show you a quick
   exhibit. It's a big one, so I'm going to hand you a
11
12
   hard copy.
13
             MR. CASSIDY: May I approach, Your Honor?
14
             THE COURT: You may.
   BY MR. CASSIDY:
15
16
        I'm going to ask you to look at 1010. Do you
   recognize that document, Ms. Murphy?
17
18
   Α
        Yes.
        And how do you recognize it?
19
20
        I recognize it because it was a supplement to the
   Surface Reclamation Plan which include refinements and
21
22
   details of the Reclamation Plan for the Flambeau Mining
23
   Company.
24
        Okay. And it's dated December 1997?
25
    Α
         Yes.
                    JANA MURPHY - ADVERSE
```

2 - A - 42

```
And you have already testified that you were the
 1
 2
   Environmental Reclamation Manager at the site?
 3
         Yes.
   Α
         So this involves reclamation and environmental
 4
 5
   matters, this document?
 6
   Α
         Yes.
 7
        And this would have been a document that was
 8
   produced by the Flambeau Mining Company or one of its
 9
   consultants?
10
         Yes.
   Α
         And in fact, it does indicate that it was prepared
11
12
   by Applied Ecological Services for the Flambeau Mining
13
    Company, if you look at the back of the cover page.
14
   Α
        Yes.
             MR. CASSIDY: Your Honor, we'd move Joint
15
16
   Exhibit 1010.
             THE COURT: Any objection?
17
             MR. VAN CAMP: No, Your Honor.
18
19
             THE COURT: Received.
20
             MR. CASSIDY: Thank you, Your Honor.
   BY MR. CASSIDY:
21
22
         If we could first turn to page five, and to try to
23
   make it easy, I'll circle on the page on the screen
24
   where I'll ask you to take a look. So circled in red,
25
    the bottom of the first full paragraph on page five.
                     JANA MURPHY - ADVERSE
```

```
you see where I've circled on the screen?
 1
 2
         Oh, I see. Yeah.
   Α
 3
         And that indicates that "runoff in the Industrial
 4
    Outlot area will be directed in a biofilter to be
 5
    located in the area of a former surge pond. The outlet
   from this biofilter will direct water to the existing
 6
 7
    Intermittent Stream C channel located in that area of
 8
    the site." Did I read that correctly?
 9
    Α
         Yes.
10
         So that was the -- what the biofilter was designed
   to do was to collect the runoff, passively treat it, and
11
12
   then direct it to the existing Intermittent Stream C
13
   channel; is that right?
14
         At that time we didn't make an effort to identify
    the habitat communities lying outside of the biofilter.
15
16
         That's not the question I asked you. I just asked
17
   you if that was what the biofilter -- this is Flambeau's
18
    words, not mine, Ms. Murphy. You understand that?
19
    Α
         Yes.
20
         That's what the biofilter was designed to do was to
21
   direct water to the existing Intermittent Stream C
22
    channel; is that right?
         That's what it states here.
23
24
         Okay. And then if we could turn back to page two,
25
    at the very top of page two, and this is in the
                     JANA MURPHY - ADVERSE
```

introduction section, again I'll circle it on the screen so you can see what I want to ask you about. It's a paragraph at the top of page two. And if you look on page one, there's a subheading called Industrial Outlot, and this is -- this comes under that subheading. And this says, "In addition" -- now I'm at the top of page two -- "In addition stormwater from the Industrial Outlot would be directed to a constructed biofilter located in the area of the former surge pond. Flow from the biofilter would be directed to Stream C." Did I read that correctly? Yes.

Α

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And just so we're clear, the biofilter that we're talking about in this document is the same biofilter we've been looking at all morning; correct?

Α Yes.

> Now have you observed channels where water has discharged out of the biofilter outlet?

Α Very, very small.

20 But the answer is yes, you have?

21 Α Yes.

22 Okay. Have you observed more than one? Q

23 Α Yes.

> Do you know how those channels are generally formed?

2 - A - 45

```
I believe it was by the movement of water.
 1
   Α
 2
         And where are those channels, the channels that you
 3
   observed, where are they directing the water?
 4
         They're within the biofilter outlet and they run in
 5
   an east/west direction.
 6
         And so how would you describe the biofilter outlet?
 7
         It's a riprapped vegetated area that's lower in
 8
   elevation than the surrounding biofilter berm.
 9
         And when you say riprap, you mean rocks?
    Q
10
         There's interspersed rocks amongst the vegetation.
   Α
        What do you mean by riprap?
11
    Q
        There's rock there.
12
   Α
13
        And about how -- so you said it's lower than the
14
   lip of the berm?
         Yes.
15
   Α
16
         Okay. And then about how long is the slope of the
   outlet?
17
         I would estimate 20 feet.
18
         So from the lip of the berm -- of the biofilter
19
20
    it's about a 20-foot distance down the slope to what?
21
         Or actually to the toe it's probably further. I
22
   haven't really observed that in detail or tried to
23
   estimate the distance.
24
         Well, how many times have you been out there taking
25
    samples?
```

```
A number of times.
 1
   Α
 2
        Hundreds?
    Q
 3
   Α
        No.
 4
        Dozens?
 5
        Perhaps.
   Α
 6
    Q
        Okay. So you've been out there quite a bit --
 7
    Α
        Yes.
 8
        -- fair to say? And I know maybe you haven't tried
   to estimate that distance before. Based on your time
10
   out there and your memory, I'm asking you to estimate it
11
   now.
       Then I would -- this is a rough estimate. I'd say
12
   30 feet.
13
14
        Okay. So you've given us somewhere between 20 and
   30 feet; is that right?
15
16
   Α
        Yes.
       Okay. And that is down to what?
17
        I would consider that to be the toe of the outer
18
   berm's slope, but I do not have a clear understanding of
19
20
   where the berm ends and the natural grade begins.
        Okay. But your estimate is to about 20 to 30 feet.
21
22
         I can't really see because of the vegetation where
   -- where -- where the outlet ends.
23
24
        Well, you were there when the biofilter was first
25
   built; right?
                    JANA MURPHY - ADVERSE
```

```
That was back in '98.
 1
   Α
 2
         Right. So there was no vegetation at that time;
 3
    correct?
 4
         No.
 5
         So there was a bunch of rocks and riprap. You
 6
    observed that. You were part of that process; correct?
 7
         I don't remember observing it. I was on -- I was
 8
   working there, but I can't remember that far.
 9
         So the only memory you have of the biofilter outlet
10
   is when it's covered with vegetation.
         Yes. I have no clear picture of during
11
12
   construction.
         What about in the winter?
13
14
        Yes, I'm not sure if I've been out there in winter.
   We don't sample in the winter.
15
16
         Okay. Do you sample before the early spring?
17
   Α
         Yes.
18
         Before the vegetation has really gotten a chance to
19
   grow and take hold.
20
         Last year's vegetation is still there.
21
         Right. But is it -- is it -- does vegetation die
22
   off a little bit in the wintertime?
23
         A little bit. This is extremely tall grass.
24
         Okay. So how about the times you're out there when
25
    there's less vegetation? Did you ever -- can you give
```

```
an estimate, a better estimate than what you just gave?
 1
 2
   Α
        No.
 3
         Okay. So it's still 20 to 30 feet?
 4
         To -- to the toe approximately, the toe of the
 5
   slope of the biofilter berm.
 6
        When you say the toe of the slope of the biofilter
 7
   berm, what do you mean by that?
        Materials that were placed there by Flambeau.
 8
   Α
 9
         Okay. So -- and for that 20 to 30 feet, that's a
10
   downward slope; correct?
        Yes.
11
12
        And that's by design so when the water overflows,
13
   it goes down that way; correct?
14
   Α
        And just the design of a berm.
15
   Q
         Okay.
16
             THE COURT: We're going to take a 15-minute
   recess at this time, and for everyone's planning, we'll
17
   break for lunch from 12:15 to 1:45.
18
19
             MR. CASSIDY: Thank you, Your Honor.
20
             THE COURT: This is the only bad day I have
21
   this week. The rest of the time we'll have regular hour
22
   breaks, but I have three sentencings today.
             MR. VAN CAMP: Your Honor, that will still be
23
24
   in another courtroom, is that correct, so we don't need
25
    to bother --
                    JANA MURPHY - ADVERSE
```

2 - A - 49

```
THE COURT: Yes.
 2
            MR. VAN CAMP: Okay. Thank you.
 3
                           10:15-10:30 a.m.)
         (Recess
             THE COURT: Mr. Cassidy.
 5
            MR. CASSIDY: Thank you, Your Honor.
 6
   BY MR. CASSIDY:
 7
       Ms. Murphy, we were -- when we broke, you were --
   we were talking about the biofilter outlet and you had
 8
 9
   testified that there was riprap there and rocks. What
10
   is riprap for at the outlet?
        I typically see riprap used to enhance erosion
11
12
   control.
        Okay. And why would you need to enhance erosion
13
   control at the biofilter outlet?
14
        If there's water movement.
15
   Α
16
        So the riprap was put there for erosion control?
17
   A Yes.
18
        And we've been talking about sort of the area of
   Stream C north of Copper Park Lane. Can you tell us --
19
20
   can you tell the Court what the water flow relationship
   is between the biofilter, Stream C, and the Flambeau
21
22
   River?
23
            MR. VAN CAMP: Objection. Foundation.
24
             THE COURT: Sustained.
25
   BY MR. CASSIDY:
                    JANA MURPHY - ADVERSE
```

2 - A - 50

```
I'm going to show you marked -- what's marked Joint
 1
 2
   Exhibit 1005.
             MR. CASSIDY: May I approach, Your Honor?
 3
 4
   a multi-page exhibit.
 5
             THE COURT: You may.
 6
         So I've handed you what's marked Joint Exhibit 1005
 7
   and it's three pages of an email exchange. Do you see
 8
   your name at the top of that?
 9
   Α
         Yes.
10
         And in the parentheses it says KMC. What does that
   refer to?
11
12
        Kennecott Minerals Company.
         Okay. So that is the company you worked for at the
13
   Flambeau Mine site?
14
15
        Yes.
   Α
16
         And typically when you print out your emails, do
   they print out with your name above them like this?
17
18
   Α
        Yes.
         And if you want to flip through the document, do
19
20
   you recognize this as an email exchange between you and
   Steve Donohue?
21
22
   Α
        Yes.
23
        And who is Steve Donohue?
24
         Steve Donohue is -- he works for Foth, and I can't
25
   remember what his title was at that time, but as a
                     JANA MURPHY - ADVERSE
```

```
consultant for Foth.
 1
 2
         Okay. So -- and Foth is a contractor that Flambeau
 3
   Mine Company uses?
 4
        Yes.
 5
             MR. CASSIDY: Your Honor, we move 10 -- Exhibit
   1005 in.
 6
             THE COURT: Any objection?
 8
             MR. VAN CAMP: Just one moment, Your Honor.
 9
             THE COURT: Sure.
10
         (Pause at 10:34 a.m.)
11
             MR. VAN CAMP: No objection.
             THE COURT: Received.
12
13
             MR. CASSIDY: Thank you.
   BY MR. CASSIDY:
14
15
        I'm going to go to the third page. As we discussed
16
   before, Ms. Murphy, the email, typically when you print
   out email exchanges, chronologically they go from the
17
   back to the front; is that right?
18
19
   Α
        Yes.
20
        So if we start on the third page, I'm going to put
   it on the screen again, so does that indicate an initial
21
22
   email that was sent to you from Steve Donohue on May
   12th, 2004, at 3:03 p.m.?
23
24
   Α
        Yes.
25
        And also cc'd on that email is J Hutchinson. Who
                    JANA MURPHY - ADVERSE
```

2 - A - 52

```
is that?
 1
 2
        He also works for Foth as a consultant to Flambeau
 3
   Mining Company.
         Okay. And the subject matter of that email is
 4
 5
   Flambeau - surface water data?
 6
   Α
        Yes.
 7
         And a couple minutes ago I asked you the question
 8
    could you tell the Court what the flow relationship
 9
   between the biofilter Stream C and the Flambeau River
10
   is; is that correct? I asked you that question?
        Yes, you asked the question.
11
12
        And there was an objection. So I want to direct
13
   your attention here to this part of the email and
14
   Mr. Donohue asks you a similar question. "Could you
   clarify for me the flow relationship between the 0.9
15
16
   acre biofilter inlet - outlet, Stream C and Meadowbrook
   Creek." Do you know what Meadowbrook Creek is?
17
18
   Α
        Yes.
         Where is Meadowbrook Creek?
19
20
   Α
         It's south of the mine site.
         South of Copper Park Lane?
21
    Q
22
   Α
         Yes.
23
         Is it a tributary to Stream C?
24
   Α
         No.
25
         Okay. Is it a tributary to the Flambeau River?
                     JANA MURPHY - ADVERSE
```

```
Α
         Yes.
 1
 2
         So if we turn to page two, at the bottom of that
 3
   page, does that reflect your reply to Mr. Donohue on the
 4
    same day, five minutes later?
 5
         Yes.
   Α
 6
         And in that reply you indicate -- I'll circle it on
 7
   the screen so you can look at it -- that "The outlet of
 8
    the 0.9 acre biofilter flows into Intermittent Stream C.
   Meadowbrook Creek is not influenced by the biofilter or
 9
10
   Stream C. Meadowbrook Creek flows west into the
   Flambeau River south of the reclaimed mine site.
11
12
   C flows southwest to the Flambeau River, just a little
   north of the Meadowbrook Creek outlet to the Flambeau
13
   River."
14
15
         Did I read that correctly?
16
   Α
         Yes.
         So was that your understanding at the time of the
17
   flow relationship between the biofilter, Intermittent
18
    Stream C, and the Flambeau River?
19
20
         Those were -- yes, that's the hydraulic gradient.
21
         Okay. So that was your understanding of that flow
22
   relationship?
         The potential for flow in that relationship.
23
24
         Again, potential. If there's water flowing in
25
    there, that relationship exists.
                     JANA MURPHY - ADVERSE
```

```
Yes, if there's sufficient water.
Α
```

And if we turn -- I just want to ask you quickly on the front page, this is the continuation of the email exchange. Now we're on Thursday, May 13th, 2004, and there's an email there from you to Steve Donohue, and what are you communicating to him in that email? Let me rephrase that. I'm sorry.

What are you communicating to him in the -- in the first paragraph of that email?

- It is copper concentrations in micrograms per liter at various sample sites.
- So these are some of the samples that you've been collecting?
- 14 Α Yes.

1

2

3

4

5

6

7

8

9

10

11

12

13

15

- And there are various designations of sample sites 16 there. I want to focus on the ones that are relevant to this inquiry here. If you -- what does STR-C refer to? 17
- 18 Α That's referring to Stream C.
- At what point? 19 0
- 20 From this I can't tell.
- 21 Okay. What is the measurement that you indicate in 22 Stream C there?
- 23 18 micrograms per liter.
- 24 And then if you go to 0.9 BF-OUT, what does that 25 refer to?

```
That refers to the outlet of the biofilter.
 1
   Α
 2
         So that's a sample of water coming out of the
 3
   biofilter?
 4
         I'd have to look at my logbook to further confirm
 5
   that.
        Well, let's do the next one there. This is .9
 6
 7
   BF-IN. What does that refer to?
        The biofilter inlet.
 8
   Α
 9
               So that's a sample of water coming into the
         Okay.
10
   biofilter?
11
   Α
        Yes.
         So BF-L is a sample of water going out of the
12
   biofilter?
13
14
   Α
        Yes.
15
         And what is the number that you got for that
16
   sample?
             THE COURT: For which? Now you're talking
17
18
   about --
             MR. CASSIDY: I'm sorry, Your Honor. For 0.9
19
20
   BF-OUT.
             THE WITNESS: 53 micrograms per liter.
21
22
   BY MR. CASSIDY:
23
       So at least for this sampling event, the micrograms
24
   per liter of copper coming out of the biofilter was
25
   higher than the micrograms of copper in Stream C?
                     JANA MURPHY - ADVERSE
```

```
With those two sample locations, yes.
 1
   Α
 2
         Okay. I'm going to ask you to take a look at
 3
   another exhibit.
 4
             MR. CASSIDY: Your Honor, if I haven't moved in
 5
   1005, I would move it in.
             THE COURT: It's in.
 6
             MR. CASSIDY: I'm sorry. Thank you.
   BY MR. CASSIDY:
 8
 9
        Now we're going to take a look at Joint Exhibit
   1003 --
10
11
             MR. CASSIDY: May I approach, Your Honor? This
12
   is another --
13
             THE COURT: You may.
        This is another multi-page exhibit, which I've also
14
   put up on the screen, and if you turn to the second to
15
16
   last page, it may be the last page of your exhibit, but
17
   there's a signature page there. Does that indicate your
   name and title?
18
19
   Α
        Yes.
20
        Okay. And does this exhibit reflect a letter,
21
   November 10th letter to Lawrence Lynch?
22
   Α
        Yes.
23
   Q And who is Lawrence Lynch?
24
        He at that time was in the mine reclamation unit
25
   with the DNR.
                    JANA MURPHY - ADVERSE
```

```
So he's with Wisconsin DNR?
 1
   Q
 2
   Α
         Yes.
 3
         And did you communicate with him on occasion?
 4
         Yes.
 5
         And the subject line of this letter is Flambeau
 6
   Mining Company - Midsummer Progress Report 2004.
 7
   you have to do midsummer -- did you have to do progress
 8
   reports and submit them to the DNR?
 9
        Yes.
   Α
10
        So is this a document you would have created?
        Yes.
11
        And you recognize the subject matter of this
12
   document?
13
14
   Α
        Yes.
15
         And it was created during the time of your
16
   employment within the scope of your employment at
   Flambeau Mine Company?
17
        Yes.
18
   Α
19
             MR. CASSIDY: Your Honor, we move 1003 in.
20
             MR. VAN CAMP: Your Honor, I object as
   relevance. This is from 2004.
21
22
             MR. CASSIDY: I can ask a question that might
23
   establish relevance, Your Honor.
24
             THE COURT: You can try.
25
   BY MR. CASSIDY:
                     JANA MURPHY - ADVERSE
```

Q If we turn to the page that has your signature, and I'll just mark it on the screen, there's a paragraph nine that says Conclusion, and a couple paragraphs up from that I've circled on the screen. That paragraph reads: "Copper and zinc concentrations have measured in offsite background stormwater runoff and in runoff from the Industrial Outlot located on the reclaimed mine site. The nonpoint resources of runoff from the Industrial Outlot are being passively treated by the 0.9 acre biofilter that substantially reduces the concentrations of metals before flowing into Intermittent Stream C that eventually discharges to the Flambeau River."

Did I read that correctly?

A You read it correctly.

- Q So that was your representation of the flow at that time to DNR from the biofilter into Stream C and to the Flambeau River?
  - A I am not sure the last part, that eventually discharges to the Flambeau River, if that's referencing flow from the biofilter or actually Intermittent Stream C.
  - Q Okay. And when you -- but we've already established that the flow from the biofilter comes down and enters into flow from Intermittent Stream C;

    JANA MURPHY ADVERSE

```
correct?
 1
 2
             MR. VAN CAMP: Objection. It mischaracterizes
 3
   her testimony.
 4
             THE COURT: Sustained.
 5
   BY MR. CASSIDY:
 6
        Well, what are you telling DNR here?
 7
             MR. VAN CAMP: Objection. Relevance.
             THE COURT: Overruled. She doesn't have to
 8
 9
   read it again.
10
             THE WITNESS: What I'm telling the DNR is that
   the biofilter, comparing what comes in and what may go
11
   out, that it's reducing those constituents that we're
12
13
   sampling.
   BY MR. CASSIDY:
14
15
        That's what you're telling them about the
16
   biofilter. What are you telling them about where it
   goes?
17
       And where it goes, again, is the -- out of the
18
   biofilter and into the watershed of Stream C, the
19
20
   potential, you know, where potentially it could go if
21
   there's sufficient water.
22
        And here you use the term eventually discharges
23
   into the Flambeau River. Is that where that water can
24
   potentially go?
25
   Α
        Potentially.
                    JANA MURPHY - ADVERSE
```

```
MR. CASSIDY: Your Honor, we move this exhibit
 2
    in.
 3
             MR. VAN CAMP: Objection. Relevance.
             THE COURT: Overruled, and received.
 5
             MR. CASSIDY: Thank you, Your Honor.
   BY MR. CASSIDY:
 6
 7
         I'm going to show you another exhibit, Exhibit 45,
 8
   another joint exhibit. Are you familiar with a
 9
    consultant named Blue Iris?
10
   Α
         Yes.
         How are you familiar with Blue Iris?
11
12
         They've conducted ecological monitoring and bio
13
   monitoring as it related to the Flambeau Mine site.
14
         You may, Ms. Murphy, have this document in that
             It's Exhibit 45. If you don't, I can --
15
    folder.
16
             MR. CASSIDY: May I approach, Your Honor?
17
             THE COURT: You may.
         And so Blue Iris is a consultant that has been
18
   hired by Flambeau Mine Company to conduct assessments?
19
20
    Α
         Yes.
21
         And did you -- did you directly hire them or were
22
   they hired through someone else typically?
23
         In this case they were hired -- it appears they
24
   were hired through Foth Van Dyke.
25
         And Foth Van Dyke is also a consultant of Flambeau
                     JANA MURPHY - ADVERSE
```

```
Mining Company?
 1
 2
    Α
         Yes.
 3
         So you're looking at a letter that's dated October
 4
    24th, 2005, and on the second page do you see your
 5
    signature?
 6
    Α
         Yes.
 7
         And what are you -- and again, this is a letter to
 8
    Lawrence Lynch with Wisconsin DNR?
 9
    Α
         Yes.
10
         And what are you, generally what are you
    communicating or transmitting to him in this letter?
11
         It's an attachment and a summary of the work that
12
13
    had been conducted by Blue Iris.
14
         And by transmitting this to the DNR, you're doing
    that on behalf of the Flambeau Mining Company; right?
16
    Α
         Yes.
         So you adopted the assessment and the information
17
18
   that you've received from Blue Iris and you're sending
19
    that along to the state regulator?
20
    Α
         Yes.
21
         Did you have a chance to review the bioassessment
22
   or the information that you had -- you were given here
23
    before you sent it to DNR?
24
         I would say yes.
    Α
25
         And in fact, the memo that is attached is dated --
                     JANA MURPHY - ADVERSE
```

```
and this is the memo on page three -- is dated -- the
 1
 2
   memo from Foth and Van Dyke to you is dated October
 3
    10th, 2005; is that right?
 4
        Yes.
 5
        And you did not send this on to Mr. Lynch at DNR
 6
   until two weeks later; right?
 7
    Α
        Right.
 8
         And so did you -- did you send it on without
 9
    looking at it or did you review it at the time?
10
        My standard practice is to review documents.
         Okay. Did you make any changes or suggest any
11
12
   edits back to Blue Iris or Foth?
13
        We usually have comments, but at the end there's a
14
    final draft that goes on to DNR.
15
        Right.
    Q
16
             MR. CASSIDY: Your Honor, we move Exhibit 45.
             MR. VAN CAMP: Objection. Relevance. And
17
18
   objection, foundation to the memo.
19
             THE COURT: Overruled, and received.
20
             MR. CASSIDY: Thank you, Your Honor.
21
   BY MR. CASSIDY:
22
         I'm going to turn your attention, direct your
23
   attention to the bio assessment of Stream C, which is
24
   the -- contained in the Foth memo. So it's about
25
   halfway in to the document.
                                 Do you see that page,
                     JANA MURPHY - ADVERSE
```

1

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22

23

24

25

happened.

Ms. Murphy? I have it up on the screen as well. Yes, I see it. Α Now this was -- what was the purpose of the bio assessment of Stream C? It was part of -- in the process of working with the DNR to evaluate the stream, this was one of the tasks that was implemented by Flambeau. To -- when you say evaluate the stream, what are you talking about? To assess what type of stream it was, what kind of biota might be in it, make general observations. Okay. And in that first paragraph there, sort of the introductory paragraph, circled on the screen, it reads that "Stream C includes drainage from locations east of Highway 27 and along the west side of Highway 27. An Industrial Outlot and associated parking lot, reclaimed rail line and biofilter pond drain into Stream C." Did I read that correctly? Α Yes. And did you -- do you remember making any changes to that part or suggesting any changes to that part when you received this bio assessment from Blue Iris? I don't remember anything as far as any comments because of the time, the length of time since it's

1

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23

24

25

```
Later on in the paragraph it says, "Stream C flows
under Copper Park Lane from the north and then takes a
meandering southwest direction through woodland to the
confluence with the Flambeau River." Do you see that?
     Yes.
Α
    And that's also your understanding of where Stream
C goes?
Α
     That's as the channel lies, yes.
     Okay. If you turn to the next page -- I'm sorry,
before we leave that, further down there's a section
called Stream Habitat and Characteristics and the first
section there, first sentence there says, "Stream flow
upstream of Copper Park Lane is unchannelized. Obvious
flow originates from the wetland area to the north and
east as well as the biofilter pond." Do you see that?
Α
     Yes.
    And would you disagree with Blue Iris's
characterization?
     I would say it has the potential, but not on all
occurrences.
     So it's intermittent?
0
Α
    Yes.
     And you say -- so when they say obvious flow, they
don't say constant flow; right?
    No, they don't say constant flow.
Α
```

```
But would you agree that there's obvious flow?
 1
   Q
 2
   Α
         At times.
 3
         And then -- and just so we're clear, that's stream
 4
   flow upstream of Copper Park Lane.
 5
   Α
         Yes.
6
         So if we turn to the next page, which is page two
 7
   of this memo, and go all the way to the bottom, we'll
8
   talk a little bit about the biota that you mentioned
9
   earlier. This sentence is going to run on to the next
10
   page, but it says, "One normally associates water
   quality with various types of aquatic
11
12
   macroinvertebrates. In particular, the presence of
13
   members of Ephemeroptera, " that's my best try,
    "Trichoptera, and Plecoptera" -- please correct me if I
14
15
   got those wrong, you're the biology major -- but on the
16
   next page they say "those species are indicative of high
17
   water quality. The observation that those species make
   up a significant portion -- proportion of the insect
18
   inhabitants suggests that water quality sufficient to
19
20
   support sensitive species, other conditions being
21
   satisfied." Did I read that correctly?
22
   Α
        Yes.
23
         And that's -- and then finally there's a fish
   assessment done. Do you see that there?
24
25
        I see the section Fish Assessment.
   Α
                     JANA MURPHY - ADVERSE
```

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Okay. And at the very bottom of that paragraph,
   Blue Iris concluded that during periods of high flow,
   there is no reason to suspect that fish would not
   migrate upstream (or conversely migrate out of the
   biofilter downstream). In conversations with Jana
   Murphy (Kennecott Minerals on-site representative), fish
   were observed in Stream C in June 2005 after a period of
   significant rainfall."
        Did I read that correctly?
   Α
        Yes.
        And do you remember telling Blue Iris about the
   fish you saw in Stream C?
         I have a general recollection. I don't
   specifically remember, but...
         Do you remember seeing fish in Stream C?
   Α
         Yes.
         Okay. And do you remember seeing fish in Stream C
   north of Copper Park Lane?
   Α
        No.
        Do you remember seeing fish in the biofilter?
   Α
        Yes.
        Did you see any other aquatic life in the
23
   biofilter?
        Frogs, toads, aquatic insects, turtles, birds -- I
   guess they're aquatic, aren't they.
                    JANA MURPHY - ADVERSE
```

```
They can be. So do you have any reason to disagree
 1
 2
   with Blue Iris's statement here that during high flow
 3
   there's not reason to expect the fish will migrate
 4
   upstream to the biofilter?
 5
       I have --
   А
            MR. VAN CAMP: Object to the form of the
 6
 7
   question.
 8
            MR. CASSIDY: I'll withdraw it, Your Honor.
 9
   That's fine.
10
   BY MR. CASSIDY:
11
       Did you -- you remember doing any edits to that
   portion of Blue Iris's assessment before you sent it to
   DNR?
13
   A Given the data, I don't remember what edits or that
14
   things were edited. So...
16
       Is it fair to say that because Flambeau sent this
   to the state regulator, that they had adopted this
17
   assessment?
18
19
   Α
       Yes.
20
       Okay. Take a look at what's marked Joint Exhibit
   1007.
21
22
            MR. CASSIDY: And may approach, Your Honor?
23
             THE COURT: You may. You don't need to ask.
24
            MR. CASSIDY: Thank you, Your Honor. Sorry
25
   about that.
                    JANA MURPHY - ADVERSE
```

BY MR. CASSIDY: 1 2 I've handed you Joint Exhibit 1007 and this is 3 entitled Biofilter Sediment Deposition Monitoring and 4 you see at the bottom there that it indicates it was 5 updated by you October of 2005; is that correct? 6 Α Yes. 7 So do you recognize this document? 8 Α Yes. 9 And then the second page, just briefly there's a 10 section that lists the name or title of the person in charge of the facility and your name is listed there. 11 12 Do you see that? 13 Α Yes. 14 And if you turn to page three of this document, put 15 it on the screen, this is -- so this is a document that 16 was updated by you? 17 Α Yes. Okay. And there under the title Biofilter Sediment 18 Deposition Monitoring, you indicate a "0.8 acre 19 20 biofilter was constructed near the discharge point of surface water drainage from the southern portion of the 21 22 former mine site to Stream C during the site 23 reconstruction -- restoration activities in the late 24 1990s. The biofilter allows settling of suspended 25 solids from the surface water to settle out prior to

```
1
   delivering the water to Stream C." Do you see that?
 2
        Where were you reading?
   Α
 3
         I'm sorry. It's the top of this paragraph where I
 4
   circled.
 5
        Yeah -- yes, I see that.
   Α
 6
    Q
        And did I read that correctly?
 7
    Α
        Yes.
 8
        So we talked about this already, but this is
 9
   another document indicating that the design of the
10
   biofilter was to deliver the water to Stream C?
        Well, it says Stream C, that Stream C watershed.
11
             MR. CASSIDY: Okay. Your Honor, we move Joint
12
   Exhibit 1007.
13
14
             THE COURT: Any objection?
             MR. VAN CAMP: No objection.
15
16
             THE COURT: Received.
   BY MR. CASSIDY:
17
        Do you, as part of your duties, I think you
18
   mentioned earlier communicate with the public or the
19
20
   press on occasion?
21
        Yes.
   Α
22
        Okay. And do you recall communicating with the
23
   public or the press about -- about issues related to
24
   this, this case?
25
        In a general sense, yes.
                    JANA MURPHY - ADVERSE
```

```
Okay. Did you ever draft up any documents or press
 1
 2
   releases?
 3
        With assistance, yes.
   Α
 4
        Who would assist you?
 5
        We would work as a team.
   Α
 6
        Who is we?
   Q
 7
        Perhaps -- I don't remember at that time, but
 8
   typically I may draft something and then someone will
 9
   review it, either my boss or if I'm working with a PR
   person at that time.
10
        Okay. But you're involved in the process?
11
12
   Α
        Yes.
13
        And typically once it's reviewed and gone through
14
   its reviews, would you then be the one communicating it
   to the public?
15
16
   Α
        Usually, yes.
        All right. Have you look at Exhibit 3. I'll hand
17
18
   you a copy. Do you recognize that document?
         It looks familiar. I -- specifically I don't have
19
20
   a strong memory of it.
         Okay. How does it look familiar?
21
22
        Again, just as we stated earlier, it's a -- I
23
   actually don't know what -- where this went or what it
24
   was for. It appears to be a write-up, but I'm not sure
25
   how it was used.
```

```
Do you remember being involved in the write-up?
 1
    Q
 2
         I'd have to -- I assume I was.
   Α
 3
         And you assume you were because it involves a lot
 4
   of environmental and reclamation matters at Flambeau
 5
   Mine site?
 6
   Α
         Yes.
 7
         So this is a document you're pretty sure was
 8
   produced by Flambeau Mine?
 9
             MR. VAN CAMP: Objection. Foundation.
10
             THE COURT: Are you able to answer that
   question, Ms. Murphy?
11
             THE WITNESS: I need to look at it further to
12
13
    see how references are made to Flambeau Mine; just tell
14
    if the person -- how -- who the message is coming from.
   BY MR. CASSIDY:
15
16
         Were you involved in the document production during
   the course of this case, producing documents to lawyers
17
   and then --
18
         There's thousands of documents and I required
19
20
   assistance with that.
21
         Okay. Do you know how those documents were Bates
   labeled?
22
23
         Yes.
24
         And does this document reflect a Bates label that
25
    would indicate to you that it came from the Flambeau
                     JANA MURPHY - ADVERSE
```

```
Mine Company?
 1
 2
   Α
         Yes.
 3
         And that's at the bottom right-hand corner where it
 4
   says FMC013810.
 5
         Yes.
   Α
 6
         So does that tell you that this was a document that
 7
   you had in your files at Flambeau Mine Company?
 8
   Α
        Yes.
 9
         Okay. And if you look at it, if you read it, can
10
   you tell whether it was a document that was generated by
   Flambeau Mine or if it was a document that was sent to
11
12
   you?
       What I can see towards the end leads me to believe
13
14
    it was generated by the Flambeau Mining Company.
             MR. CASSIDY: Your Honor, we'd move Exhibit 3
15
16
   into evidence.
17
             THE COURT: Any objection?
18
             MR. VAN CAMP: Just one moment, Your Honor.
    (Pause) No objection.
19
20
             THE COURT: Received.
21
             MR. CASSIDY: Thank you, Your Honor.
22
   BY MR. CASSIDY:
23
         Just generally, Ms. Murphy, what is this document
24
   about?
25
         It appears to be an overview of --
                    JANA MURPHY - ADVERSE
```

```
I'm sorry. I'm sorry to interrupt you.
   Q
 1
 2
             MR. CASSIDY: Your Honor, I'm going to withdraw
 3
   the question.
             THE COURT: You may.
 5
             MR. CASSIDY: The document is in. It speaks
 6
    for itself. Thank you, Ms. Murphy.
 7
   BY MR. CASSIDY:
 8
         I'm going to show you a different document,
 9
   hopefully this will be a little more familiar. It's
10
   document 1006. And actually before I do that, what is
   your understanding of the biofilter's ability, if any,
11
12
   to influence copper levels in Stream C?
       The potential, if removal isn't taking place, is
13
   the potential of copper leaving the biofilter and into
14
   the adjacent environment.
15
16
        And that would include Stream C?
             MR. VAN CAMP: Objection. Foundation.
17
             THE COURT: Sustained.
18
   BY MR. CASSIDY:
19
20
        Okay. Well, let's look at a document then. It's
21
   1006. And if you turn to page six of that document, do
22
   you see your signature?
23
         Yes.
24
         Is this document another letter that you wrote to
25
   Larry Lynch at Wisconsin DNR?
                    JANA MURPHY - ADVERSE
```

2 - A - 74

Α Yes. 1 2 And this letter is dated August 5th, 2004? 3 Yes. Α 4 And the subject matter of the letter is "Proposed 5 Monitoring Plan for Intermittent Stream C." What is the 6 -- what are you referencing when you talk about the 7 Proposed Monitoring Plan for Intermittent Stream C? 8 The stream that flows past the mine site and the 9 watershed that is in that area and the channel that is 10 through the woods and to the river. And this is -- you're getting a Monitoring Plan 11 12 together for that stream; is that correct? 13 Α Yes, yes. 14 All right. And that's what this letter is about? 15 Yes. Α 16 Okay. And I had just asked you a question about your understanding of the biofilter's ability, if any, 17 18 to influence copper levels in Stream C. And if you turn to page two, under the section Biofilter Monitoring, you 19 20 told Mr. Lynch in 2004 the biofilter has two factors that influence its ability to control the copper levels 21 22 discharged into Intermittent Stream C; the influent 23 characteristics in the sediment that has been collected 24 to date; is that correct? 25 Yes, that's what it says there. Α

JANA MURPHY - ADVERSE

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2-A-175

And that's what you wrote? Q That's what I wrote. Α Okay. And so those are the ways -- is it fair to say those are the ways the biofilter has the ability to control copper levels discharged into Intermittent Stream C? Let me read that again. I don't agree with this in its entirety. There's -- I believe there's additional factors. So are those additional factors set forth -- well, I'll just ask you what are those additional factors? The -- with as far as the sediment collected today, if that's referring to its depth and the retaining, time of retention within the biofilter, then yes, I agree with that. Okay. But you said there were additional factors. There are more than two factors. There's more than two ways that the biofilter would influence the ability to control the copper levels discharged into Intermittent Stream C, and I'm just trying to get an understanding about what the additional factors are. This, in my opinion, is the primary, and additionally there's other factors that in detail I can't speak but may be related to biological uptake.

Okay. So there are other factors that would -- we

JANA MURPHY - ADVERSE

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can agree there are other factors other than what you've
listed here, so there's at least two and there's going
to be more; right?
     That I don't know.
     Well, okay. I want to be clear. Here you say
there are two factors that influence the ability to
control copper levels discharged into Intermittent
Stream C. What I thought I heard your testimony just
now was there are additional factors. Is that what you
just said?
    Additional factor or factors. To what degree I
don't know.
    Okay. Fair enough. So there's at least two,
but -- and there's more, we just don't know how many
more.
    I don't.
     You don't. You know, we talked about the Stream C
watershed and used various terms, but how do you define
the Stream C system?
         MR. VAN CAMP: Objection. Vague.
         THE COURT: Sustained.
BY MR. CASSIDY:
     Can you turn to page four of your letter,
Ms. Murphy. And just so we know what section we're
under, on page three there's a subheading 2. Stream C
                JANA MURPHY - ADVERSE
```

```
watershed evaluation and biological assessment; is that
 1
 2
   right?
        What section?
 3
   Α
 4
         On page three, it's Section 2. entitled Stream C
 5
   Watershed Evaluation and Biological Assessment.
 6
   Α
        Okay. Yes.
 7
         So that section continues over on to page four and
   your -- in this section you're communicating to DNR the
 8
   purpose of the biological assessment; is that correct?
 9
10
        I have to review this. Could you repeat your
   question?
11
        After you've reviewed it, what are you
12
13
   communicating about, in Section 2 to the DNR?
       It -- in Section 2, we're communicating some
14
   explanation as to sample points as part of the Stream C
15
16
   watershed evaluation.
        And that includes the biological assessment?
17
18
   Α
        Yes.
19
        And then when you get to the end of the section and
20
   you're on page four, you write -- I've circled it on the
21
   screen just before Section 3 -- you write: "The
22
   biological assessment will include the entire Stream C
23
   system, from upstream of the Flambeau Mine site to the
24
   confluence with the Flambeau River." Did I read that
25
   correctly?
                    JANA MURPHY - ADVERSE
```

```
Α
         Yes.
 1
 2
         I'm going to show you another document, it's
 3
   Exhibit 9 --
             MR. CASSIDY: I'm sorry, Your Honor. I would
 5
    like to move into evidence 1006.
             MR. VAN CAMP: Objection. Relevance. This is
 6
 7
    an '04 document.
             THE COURT: I'm sorry, what else did you say?
 8
 9
             MR. VAN CAMP: It's a 2004, '04 document.
10
             THE COURT: Overruled, and received.
             MR. CASSIDY: Thank you, Your Honor.
11
             THE COURT: And the document you're now
12
    introducing?
13
14
             MR. CASSIDY: Exhibit 9, Your Honor.
   BY MR. CASSIDY:
15
16
        I asked you a few questions, so we were talking
   about that was a Monitoring Plan letter exchange between
17
   you and DNR, and was there, in fact -- and that referred
18
   to a proposed Monitoring Plan. Was there, in fact, a
19
20
   Monitoring Plan that was undertaken for Stream C?
21
   Α
        Yes.
22
        And this exhibit, I've handed you Exhibit 9 which
23
   is a letter dated September 15th, 2004, to yourself.
24
   And if you turn to the second page, it is signed by
25
   Lawrence Lynch, who we've seen other communications
                    JANA MURPHY - ADVERSE
```

```
between you. He's with the DNR; correct?
 1
 2
   Α
        Yes.
 3
        So is this a letter you received from Lawrence
 4
   Lynch?
 5
        Yes.
   Α
 6
        And does it involve the Monitoring Plan for
 7
   Intermittent Stream C?
 8
   Α
        Yes.
 9
        Okay. Is this a letter you would have saved in
10
   your files?
11
   Α
        Yes.
        And you also see the Bates stamp at the bottom
12
13
   right; again, it's the FMC Flambeau Mining Company Bates
14
   stamp?
15
   Α
        Yes.
        It's a letter you would have kept in the regular
16
   course of your business as the Environmental and
17
   Reclamations Manager?
18
19
   Α
        Yes.
             MR. CASSIDY: Your Honor, we move Exhibit 9.
20
            MR. VAN CAMP: Objection. Hearsay.
21
22
   Foundation.
23
             THE COURT: Sustained.
24
            MR. CASSIDY: Your Honor, is it sustained on
25
   both --
                    JANA MURPHY - ADVERSE
```

```
THE COURT: Well, it certainly is sustained on
 2
   hearsay grounds.
 3
            MR. CASSIDY: In that case, Your Honor, I would
 4
   offer it not for the truth, but I'm going to offer it
 5
    for -- to show what effect, if any, it had on
   Ms. Murphy's Sampling Plan.
 6
             THE COURT: You can ask her that.
 8
            MR. CASSIDY: Okay.
 9
             THE COURT: But I'm not receiving the document.
10
            MR. CASSIDY: Understood, Your Honor.
   BY MR. CASSIDY:
11
        When you received this letter, if you look on --
12
   page one, point one, it talks about sampling points in
13
    Stream C. Do you see that?
14
        Yes.
15
   Α
16
        And does that indicate a particular sampling point
   SW-C7?
17
            MR. VAN CAMP: I'll object as relevant in the
18
   2000 --
19
20
             THE COURT: Sustained. Did you do anything
   different as a result of that letter with respect to
21
22
   sampling?
23
             THE WITNESS: Yes.
24
   BY MR. CASSIDY:
25
        What did you do?
                    JANA MURPHY - ADVERSE
```

```
I -- I collected a sample outside or down the
 1
   Α
 2
   outlet of the -- the outlet area of the culverts under
 3
   the former rail spur.
 4
         And where is that in relation to the biofilter?
 5
         It's to the north.
   Α
 6
    Q
         So is it upstream?
 7
        Speaking in a watershed perspective, yes.
 8
    Q
         How did you know where to collect that sample?
 9
         Because I believe it's described here.
   Α
10
   distance isn't that far really.
         The distance from where?
11
         From the biofilter outlet to the former railroad
12
13
    spur, and Larry is stating here to collect the sample
14
    upstream from what -- as you had read. He's stating it
    as the confluence of Stream C and the outlet from --
15
16
             THE COURT: Just tell us what you did as a
17
   result of doing it.
18
             THE WITNESS: Okay. Sorry. I collected a
    sample north, between -- I collected a sample south of
19
20
    the railroad culverts and north of the biofilter outlet.
   BY MR. CASSIDY:
21
22
         And my question is just how did you know where to
23
    collect the sample?
24
         Because I know where the biofilter outlet is and I
25
    know where the culverts are.
                     JANA MURPHY - ADVERSE
```

```
But what in this letter --
 1
   Q
 2
             THE COURT: But that letter is not in evidence.
             MR. CASSIDY: I understand.
 3
 4
         So how did this letter affect where you collected
 5
    your sample?
 6
         Because from what I've read is that Larry wanted a
 7
    sample upstream as far as, in a watershed way, from the
   biofilter outlet.
 8
         Well, do you know why he wanted that sample?
 9
10
             MR. VAN CAMP: Objection. Foundation.
             THE COURT: Sustained.
11
   BY MR. CASSIDY:
12
13
         Did you relocate any other samples based on this
14
    letter? Just to try to speed along, I'll direct your
    attention to point six, if that helps.
15
16
         It -- he is approving the location of SW-C5, which
   we've already -- we had been -- we had been sampling
17
   that downstream of Copper Park Lane.
18
         And had you changed that location?
19
20
    Α
         Yes.
         To where?
21
    0
22
   Α
         On the inlet side of the farmer's culvert.
23
         So that would be upstream of Copper Park Lane?
24
         Well, that's too general a way to describe it.
25
   reference the farmer's culvert, so it's at the inlet of
                     JANA MURPHY - ADVERSE
```

```
the farmer's culvert where water flows into the farmer's
 1
 2
   culvert.
 3
               And I'm just saying that's north of Copper
 4
   Park Lane.
 5
        Yeah, that's north.
 6
        Okay. How did -- the first sample that you talked
 7
   about that was north of the biofilter that you started
 8
   to take as a result of this letter, how did you take
 9
   that sample? Physically how did you do it?
10
         I would walk out there and try to find a spot that
   was accessible. There was -- it seems generally there's
11
12
   a pool of water there in a wetland area, so it was just
13
   a matter of trying to find someplace probably halfway
   between the railroad culvert and the outlet.
14
15
        And these are surface water samples we're talking
16
   about?
17
   Α
        Yes.
18
         Is it part of your job -- strike that. When you're
19
    taking -- when you're taking those surface water
20
    samples, how are you collecting them? And I'm speaking
    -- I'm going to limit it to north of Copper Park Lane.
21
22
             MR. VAN CAMP: Objection. Asked and answered.
23
             THE COURT: Sustained.
24
   BY MR. CASSIDY:
25
        Do you have a specific method that you use to
                     JANA MURPHY - ADVERSE
```

```
collect the water?
 1
 2
         If sufficient water is present, then we'll use a
 3
   clean plastic scoop to dip water.
 4
         How big is the clean plastic scoop?
 5
         It is probably between half liter and a liter as
 6
    far as the scoop part.
 7
         Okay. And was there -- and I'm talking about the
 8
   samples you collected north of Copper Park Lane, was
 9
   there always sufficient water to use the scoop when you
10
   were collecting samples?
         If I collected samples, then yes.
11
12
         Okay. Do you know if Stream C has a high water
13
   mark north of Copper Park Lane?
             MR. VAN CAMP: Object to the form of the
14
   question. Vague.
15
16
             THE COURT: Sustained.
   BY MR. CASSIDY:
17
         Do you know what a high water mark is?
18
         There's different definitions.
19
20
        What is your understanding?
21
         It depends upon what you're observing.
   Α
22
         Well, if you're observing a stream, what would be
23
   the high water mark?
24
             MR. VAN CAMP: Objection. Vague.
25
             THE COURT:
                         Sustained.
                     JANA MURPHY - ADVERSE
```

```
BY MR. CASSIDY:
 1
 2
        Did you ever observe a high water mark in Stream C
 3
   north of Copper Park Lane?
             MR. VAN CAMP: Same objection.
 5
             THE COURT: Sustained.
   BY MR. CASSIDY:
 6
 7
        Do you know if -- do you know if Stream C has
 8
    discernible banks north of Copper Park Lane?
        A short section where the mining company disturbed
 9
10
   the channel as it's enhanced with riprap for erosion
    control, and in that area, I would say there's a visible
11
12
   bank, so to speak.
13
        What area is that? Would it help if I --
        That's just north of the inlet of the culvert under
14
   Copper Park Lane, just immediately adjacent.
15
16
         So just north of the inlet flowing down into Copper
17
   Park Lane, that's the area you were speaking of?
18
   Α
        Yes.
         Okay. Have you ever seen water flowing in Stream C
19
20
    south of the biofilter?
21
             MR. VAN CAMP: Objection to the form of the
22
   question.
23
             MR. CASSIDY: I'll rephrase that, Your Honor.
24
   BY MR. CASSIDY:
25
        Have you ever seen water flowing south of the
                    JANA MURPHY - ADVERSE
```

```
biofilter and north of Copper Park Lane, in that
 1
 2
    section?
             MR. VAN CAMP: Objection to the form of the
 3
 4
   question. Objection. Foundation.
 5
             THE COURT: Sustained.
 6
   BY MR. CASSIDY:
 7
         Do you keep logbooks, Ms. Murphy?
 8
   Α
        Yes.
 9
         And have you been keeping logbooks since you were
10
   -- since you've been working at the mine site?
         The mining company has kept logbooks, whether --
11
12
   it's whomever is doing the field work.
13
        Okay. And do you make -- so you make entries in
14
   those logbooks?
15
        Yes.
   Α
16
         All right. I'd like to show you a couple entries
   from your logbooks, and this is Exhibit 6. When you
17
   make those entries, you're doing that on behalf of
18
   Flambeau Mining Company as part of your job?
19
20
   Α
         Yes.
21
         And those are made at or near the time of the
22
   events you're witnessing?
23
         Yes.
24
         And I just handed you what is marked plaintiffs'
25
    exhibit or Exhibit 6 and it has -- it's a copy of a
                     JANA MURPHY - ADVERSE
```

```
1
   cover of a Wright in the Rain All-weather Level Book.
 2
   Are you familiar with those types of logbooks?
 3
   Α
         Yes.
         Those are the ones you can go out in the rain and
 4
 5
   it doesn't get blurry?
 6
   Α
         Right.
 7
         And there's some dates indicated at the top.
 8
   you recognize that handwriting?
 9
         That's my handwriting.
   Α
10
         Are you indicating a range of dates for this
11
   logbook?
12
   Α
        Yes.
13
        Okay. And if you could turn to the last two pages
   of that exhibit, and do you see -- they're also on the
14
   screen there. Do you see that?
15
16
   Α
        Yes.
         So do you typically date the days you're out there
17
   sampling?
18
         Yes.
19
   Α
20
         And so here you've dated -- you've indicated a date
   9 -- September 15th, '04 and it's called Intermittent
21
22
    Stream C Sampling. Do you see that?
23
         Yes.
24
         And is this your handwriting?
25
         Yes.
    Α
                     JANA MURPHY - ADVERSE
```

```
All right. So on that date that you've entitled
 1
 2
   Intermittent Stream C Sampling, where were you
 3
    collecting samples?
             THE COURT:
                        I'm sorry, where do you see
 5
   Intermittent Stream C Sampling?
 6
             MR. CASSIDY: I'm sorry, Your Honor. I've
 7
   circled it in red up at the top.
 8
             THE COURT: It doesn't say Intermittent Stream
 9
    С.
10
             MR. CASSIDY: You are correct, Your Honor.
   BY MR. CASSIDY:
11
12
        What does that say there?
13
        Behind -- at the very top or the first horizontal
   line?
14
        The line next to 9-15-04.
15
16
        That says I-n-t Stream C Sampling and I-n-t stands
   for Intermediate.
17
             MR. CASSIDY: Thank you, Your Honor.
18
             THE COURT: Intermediate?
19
20
             THE WITNESS: I-n-t is just my shorthand.
21
             THE COURT: But it's for intermediate, not for
22
    intermittent?
23
             THE WITNESS: I'm sorry, yes. Thank you.
24
             THE COURT: But it is Stream C.
25
             THE WITNESS: Yes, intermittent. Yes.
                    JANA MURPHY - ADVERSE
```

```
BY MR. CASSIDY:
 1
 2
        So where were you on this date that you indicated
 3
   you're sampling at Intermittent Stream C, where were you
 4
    collecting samples?
 5
             MR. VAN CAMP: Objection. Relevance.
                                                    This is
 6
    2004.
 7
             MR. CASSIDY: Your Honor, it goes to where the
 8
    stream is and where it begins and where Flambeau's
 9
   understanding.
10
             THE COURT: Eight years ago --
             MR. CASSIDY: I can --
11
12
             THE COURT: Seven years ago.
13
             MR. CASSIDY: I'm going to bring it forward in
14
   terms of -- and we can establish that the stream, you
   know, until perhaps recently, they were taking samples
15
16
   in the same places.
             THE COURT: Let's bring it more recent.
17
   BY MR. CASSIDY:
18
        Your Honor -- I'm sorry. Ms. Murphy, was this
19
20
    sampling part of the proposed Monitoring and Sampling
21
   Plan for Intermittent Stream C?
22
             MR. VAN CAMP: Objection. Relevance. I think
23
   he's still referring to the same thing.
24
             THE COURT: Are you still talking about this?
25
             MR. CASSIDY: I'm talking generally, your
                     JANA MURPHY - ADVERSE
```

```
sampling.
 1
 2
             THE COURT: So we should take this off the
 3
    screen and she should just set down those papers. Now
 4
   your question?
 5
   BY MR. CASSIDY:
 6
        Have you taken monitoring and sampling data in
 7
    Intermittent Stream C in the past?
 8
   Α
        Yes.
 9
        And in that time, have you -- are there certain
10
   sample points that you take samples from?
         There's many sample points, yes.
11
         Okay. And how have those sample points changed, if
12
   any -- if at all since 2004?
13
        There were various phases of under what Plan we
14
15
   were sampling, different -- different plans. It might
16
   have been the Assessment Plan or the Biofilter
   Management Plan or most recently the stipulation.
17
        Okay. I'm going to put back up on the screen
18
    Exhibit 10 -- 1024. And are there certain areas -- are
19
20
   there certain points on that exhibit where you have been
21
   collecting surface water samples?
22
             MR. VAN CAMP: Objection. Vague as to time.
23
             THE COURT: Sustained.
24
   BY MR. CASSIDY:
25
         Well, let's go -- let's go -- let's talk about
                    JANA MURPHY - ADVERSE
```

```
2004.
 1
 2
             THE COURT: No, let's not.
             MR. CASSIDY: I'm trying to get specific as to
 4
    time.
 5
             THE COURT: Let's talk about --
 6
            MR. CASSIDY: Do you want me to walk backwards,
 7
   Your Honor, from --
 8
             THE COURT: No, I want to you walk recent.
 9
            MR. CASSIDY: Okay.
10
   BY MR. CASSIDY:
11
        How about last year? Were you taking samples out
12
   anywhere on this document that you see? Do you see the
13
   map on the screen?
14
        Yes. I see the map.
15
        Okay. Are there points along this map -- sorry
16
   about the glare -- where you have -- where last year you
   took samples, surface water samples as part of your job?
17
        This shows two of several others.
18
        Can you mark on here the two points where you were
19
20
   taking surface water samples last year?
        (Witness indicates)
21
   Α
22
        Just so we're clear, where have you marked?
        I've marked the inlet of the farmer's culvert
23
   that's east of the biofilter and north of Copper Park
25
   Lane.
                    JANA MURPHY - ADVERSE
```

```
Okay. That's one place. Where was the other
 1
   Q
 2
   place?
         The other place I collected water was the biofilter
 3
 4
   outlet.
 5
                That's two. And then we just discussed a
        Okay.
 6
    letter from DNR that you indicated caused you to collect
 7
    samples upstream. Were you still collecting those
 8
   samples last year?
 9
   Α
        No.
10
         When did you stop collecting those samples?
         I do not remember. I know for the Biofilter
11
12
   Management Plan that was approved, that location wasn't
   specified as a sampling location.
13
14
        When was that Biofilter Management Plan approved?
         I'd have to look at the document to remember.
15
16
         Okay. When -- but from -- so when did you -- so
   you don't remember when you stopped taking samples
17
   there?
18
         It was a number of years ago.
19
20
         Okay. And did you give these sample points -- did
   you know them by designation? Were they given a number?
21
22
   Α
        Yes.
23
               What were the numbers for the two you've
24
   indicated?
25
   Α
        We've got, for the one shown at the inlet of the
                    JANA MURPHY - ADVERSE
```

```
farmer's culvert, that was known as SW-C5. And the --
 1
 2
   where I collected water from the outlet, that's known as
   BFSW-2.
 3
 4
        And so that was two thousand -- that was last year,
 5
   2011?
 6
   Α
       Yes.
 7
       How about 2010? Were you collecting samples at
   those locations then?
 8
 9
        Yes.
   Α
10
       And do you remember if you were collecting samples
   at any other locations on this map in 2010?
11
        This map doesn't show enough to be able to state
12
   those other locations.
13
14
        Okay. Can you just tell us where the other
   locations are?
15
        To the north of the former rail spur and west of
16
   Highway 27 in the highway ditch.
17
        So further north of this picture?
18
   Q
19
   Α
        Yes.
20
        And then -- and west of Highway 27?
21
   Α
        Yes.
22
        What was -- what were the sample number
23
   designations for those points?
24
   Α
        SW-C8.
25
        Which was which one?
                    JANA MURPHY - ADVERSE
```

```
The one north of -- the one along the highway.
 1
   Α
 2
         Okay. And were there other -- was there other
 3
   samples north that we can't see on this picture?
 4
         There were additional samples collected, but that
 5
   was just a one-time collection and that data was
6
   provided to the Department.
 7
         Okay. So the samples you've indicated here are
8
   regular samples you're taking -- not the one time, but
9
   the one you've talked about, SW-C8, BFSW-C2 and SW-C5,
10
   those are all samples you took on a regular basis in
    2010 and 2011?
11
12
             MR. VAN CAMP: Objection as to form. Vaque as
13
   to regular basis.
14
             THE COURT: Overruled.
15
             THE WITNESS: It was dependent upon if water
16
   was available or not.
   BY MR. CASSIDY:
17
18
        Okay. But those were sampling points you returned
19
   to.
20
   Α
         In additionally to one east of the highway.
21
         What was the name of that sampling point?
   Q
22
   Α
         SW-C3.
23
         So we've said 2011 and 2010. How about 2009?
24
   you collecting samples at those locations in 2009?
25
   Α
         I was -- yes, I would check those locations to see
                    JANA MURPHY - ADVERSE
```

```
if there was enough water to collect and collect if
 1
 2
   there was.
         Okay. And how about 2008?
 3
 4
    Α
         Yes.
 5
        How about 2007?
    Q
 6
         I believe there were -- one of either SW-C8 and
 7
    SW-C3 or both were added during the fall of '97
   monitoring, but without looking at a document I can't
 8
 9
   say for sure.
10
         And I think you just said '97, but did you mean
11
   2007?
12
   Α
        Yes.
13
   Q
        Okay.
14
   Α
        Thank you.
15
         For -- and then there's the other sample point that
16
   we touched on earlier with the letter in 2004 where you
17
   said as a result of that letter you put a sampling point
   above the biofilter. Do you remember that?
18
19
   Α
        Yes.
20
         Okay. Do you remember how long you took -- how
   many years you took samples at that location?
21
22
   Α
         I don't remember.
23
         Would it help refresh your memory if you looked at
24
   some of your logbooks?
25
         Yes.
   Α
                     JANA MURPHY - ADVERSE
```

```
Okay. What was the designation of that location?
 1
   Q
 2
         SW-C7.
   Α
 3
         All right. And in -- did -- for the points where
 4
   you were taking those samples, did you try to return to
 5
   the same place to sample?
 6
   Α
        Yes.
 7
         Okay. And is there -- what was the reason for
8
   that?
9
        There were assorted reasons, primarily for
10
   continuity between comparising -- comparing data
   results.
11
12
        So it was important to go back to the same spot to
   sample?
13
14
         Within, you know, a few feet, yes.
15
         Why don't we look at some more recent logbooks.
16
   you have Number 8? While we're looking for that, let me
17
   show you a photograph. This is Exhibit 12. You see
   Exhibit 12 down here. Do you recognize what we see in
18
   this photograph?
19
20
   Α
        Yes.
21
        What are we looking at?
22
        We're looking to the north from Copper Park Lane
23
   and we're standing over the location of the culvert that
24
   goes under Copper Park Lane.
25
         So in terms of the sampling points that we just
                    JANA MURPHY - ADVERSE
```

```
discussed, are there any on this that you can identify
 1
 2
    on this photograph, any areas where you would sample?
        Because I can see the farmer's culvert, I collected
 3
 4
    samples at SW-C5, which is a location you can't see, at
 5
   the inlet of the farmer's culvert. So it's somewhere
 6
   there, but lower. (Indicating)
 7
         Okay. So when you say inlet you mean on the --
        North side.
 8
   Α
 9
         North side is where you collected your samples.
10
   And what we're looking at here in the middle of the
   photograph, the culvert in the middle of the photograph,
11
12
   is the farmer's culvert coming out on the south side.
        Right.
13
   Α
14
         Okay. So that at least -- that's SW-C5 is -- you
15
   can't see it in this picture, but that's where you would
16
   take samples.
17
   Α
         Right.
18
         I'll hand you another logbook.
             THE COURT: What's the exhibit number on that
19
20
   one?
21
             MR. CASSIDY: Sorry, Your Honor. It's Exhibit
22
    8.
23
             THE COURT:
                        Thank you.
24
   BY MR. CASSIDY:
25
         And again, do you see the Write in the Rain copy on
                     JANA MURPHY - ADVERSE
```

```
1
   the cover there and some dates at the top?
 2
   Α
         Yes.
 3
         And is that your handwriting?
 4
         Yes.
 5
         And if you could turn to page -- I'll go by the
 6
   logbook page just because those are the small numbers up
 7
   there and easy to see. Page 58. Are you there?
 8
   Α
         Yes.
 9
         Okay. Now the date at the top of that entry, log
10
   entry is April 25th, 2008?
11
   Α
         Yes.
         And you've entitled it Surface Water Sampling; is
12
13
   that right?
14
   Α
        Yes.
15
         And is this your handwriting?
16
   Α
         Yes.
         Okay. And if you go down to the bottom of that
17
18
   page, there's an SW-C1 (grab). What sample point are
19
   you talking about there?
20
         This is the -- this is south of Copper Park Lane.
21
         Okay. How far south approximately?
22
         I would say it's within 50 feet -- 30 feet of the
23
   outlet of the culvert.
24
         Okay. And you indicate -- you take some
25
   measurements there.
                        What did you find to be the pH that
                     JANA MURPHY - ADVERSE
```

```
day?
 1
 2
         6.25.
   Α
 3
         And what did you indicate about the flow at that
 4
    location?
 5
         High.
   Α
 6
         And by high flow, what do you mean?
 7
         It's greater than what I would normally see.
   isn't quantitated, it's just a qualitative description.
 8
 9
         What were the different -- would you say high/low;
10
   high/medium low or how would you do it?
         Yeah. Low, medium, high, very low.
11
         Okay. So would high be the highest? Would you
12
   ever do very high?
13
         It's all dependent upon what is happening.
14
15
         Okay. So is it fair to say there's a lot of water
16
   flowing when you indicate high?
17
   Α
         On that, yes.
         Okay. And if you turn to page 60 and we go to the
18
   bottom of that page, we're still on 4-25-08; correct?
20
   Α
         Yes.
         And I've circled on the screen, but there's an
21
22
   indication of BFSW-C2. What is that sample location?
23
         That is the outlet of the biofilter.
24
         Okay. So -- and did you take pH there that day,
25
    too?
                     JANA MURPHY - ADVERSE
```

```
1
    Α
         Yes.
 2
         And what was the reading?
 3
         6.89.
    Α
 4
         And what was the flow at the outlet of the
 5
   biofilter?
 6
    Α
         High.
 7
         Then below that you have crossed out something.
 8
   Are those your initials? Were you making a correction?
 9
    Α
         Yes.
10
         And is that SW-C5, what is that location?
         That is at the inlet of the farmer's culvert.
11
12
         Okay. So, and what did you note the pH to be
   there?
13
         6.23.
14
    Α
15
         And what did you note the flow to be there?
16
        High, with an additional comment of flowing around
17
   culvert.
18
         So if I put back on the screen Exhibit 12 where we
    saw the farmer's culvert on 4-25-08, you noticed it, it
19
20
    was actually flowing around the farmer's culvert; is
   that correct?
21
22
         Not as you show there.
         Okay. How did you indicate or what was going on in
23
24
    terms of this picture?
25
         The farmer's culvert -- actually what was going on
    Α
                     JANA MURPHY - ADVERSE
```

```
was on this, on the lower elevation here. Kind of in
 1
 2
   that general area.
         So was there water flowing through the culvert?
 3
 4
         Yes. I would say so, yes.
 5
         And there was enough water that it was also flowing
 6
   around the culvert?
 7
         Yes.
    Α
 8
         Okay. And then just back to your logbook, on page
 9
    61, the next page, at the top, you took a sample at
10
   SW-C8. Do you see that?
         Yes.
11
   Α
         And where is SW-C8 in relation to the biofilter?
12
         That in relation to the biofilter, it is northeast
13
   Α
   in the highway ditch on the west side of Highway 27.
14
15
         So is that upstream?
    Q
16
   Α
         As far as gradient-speaking elevation, yes.
         It's upstream in the watershed?
17
   Q
18
   Α
        Yes.
19
         Okay. And there you have a pH reading of what?
20
   Α
         6.07.
         And what did you note about the flow there?
21
   Q
22
   Α
         "High; ditch full with flow evident."
23
         Okay. Let's go to page 126. Now this is a
   different date?
24
25
         Yes.
   Α
                     JANA MURPHY - ADVERSE
```

```
Okay. So what -- we're basically a year later,
 1
 2
    April 25th, 2009?
 3
    Α
         Yes.
 4
         And how often would you take samples at these
 5
    locations per year?
 6
    Α
         An attempt was made at all the locations twice a
 7
    year.
 8
    Q
         Okay. What times of year?
 9
    Α
         Generally in the spring and fall.
10
         And so this would have been the spring sampling?
    Q
         Yes.
11
    Α
         And is this your handwriting also?
12
13
    Α
         Yes.
14
         And at -- you indicate this is SW monitoring. Does
    that stand for surface water?
15
16
    Α
         Yes.
         And then there's a notation at about or squiggly
17
18
    line 2:30 p.m. flow observed in Stream C. Do you see
19
    that?
20
    Α
         Yes.
         And what are you indicating there?
21
22
         One of the guidelines of when I sample is since
    it's easily accessible, I'll check at the south of
23
24
    Copper Park Lane to see if there's any flow and that's
25
    likely what I'm referring to.
                     JANA MURPHY - ADVERSE
```

```
Okay. So when you say Stream C there, you're
 1
 2
   pretty sure you're referring to south of Copper Park
 3
   Lane?
 4
         That's -- yeah, if I'm not collecting at another
 5
    location that's noted, then yes, 'cuz that's where I
   will check to see, and if there's no flow, then I won't
 6
 7
   plan -- I don't sample that day.
 8
         If you go to the bottom of that page, you say below
 9
   CPL. What does that mean?
10
         Below Copper Park Lane.
         All right. And what do you indicate there for
11
12
   flow?
        Moderate flow.
13
   Α
         And that would have been sample point SW-C1?
14
15
         Yes.
   Α
16
         I don't think we've covered that one yet, but just
17
   so we know, what sample point was that? Was that
   downstream of Copper Park Lane?
18
19
   Α
         Yes.
20
         And then the next page, 127, you have above CPL.
21
   Does that refer to Copper Park Lane?
22
   Α
         Yes.
23
         And then you put dash Stream C?
24
   Α
         Yes.
25
         And what do you indicate about the flow there?
                     JANA MURPHY - ADVERSE
```

```
Says mod flow which stands for moderate.
 1
    Α
 2
         So the flow there was the same as it was below
 3
    Copper Park Lane?
 4
         That's what the notes say.
 5
         And you took these notes while you were observing
 6
    this; right?
 7
         Yes.
    Α
 8
         All right. And then SW, you make a notation SW-C5.
 9
    That is the sample point above the stub road culvert;
10
   correct?
         Right.
11
         So that's where you're taking that sample and
12
13
    that's where you're observing the flow.
14
    Α
        Yes.
         And then if you go a little further down that page,
15
16
   I've put a circle around it on the screen, but you have
    a sample for the biofilter outlet?
17
18
    Α
        Yes.
         And what do you indicate your observation is for
19
20
    that sample point?
21
         I'm sorry, could you repeat that?
22
         I said what do you indicate your observation was
23
    for that sample point?
24
         It says, "low flow across outlet in Stream C; note
25
    that tree cut upstream and fell across channel."
                     JANA MURPHY - ADVERSE
```

1

2

3

4

6

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

24

25

```
So I just want to take those one at a time. When
   you say low flow across outlet in Stream C, what are you
   observing?
        I don't know exactly where I'm observing because of
 5
   the length of the biofilter outlet.
        What are you observing?
        I would say I'm observing the area that flows into
8
   the adjacent wetland.
        And here you call that Stream C?
   Q
        Well again, that's the Stream C watershed.
        Okay. The second part of your note says "Note that
   tree cut upstream and fell across channel." So what are
   you noting in your observation there?
        What I'm noting is that upgradient, that someone
   had cut a tree and the water that I saw there -- that
   the tree was across the water.
        Across the channel.
        I don't know for sure if it was a channel. I
   didn't walked through it to check to see if -- if it met
   the definition of a channel, whatever that definition
   may be.
        I don't know what the definition is. I'm just
   wondering what you saw and I'm going off your notes and
23
   you say it fell across the channel. Did you see --
        That's what it says here.
   Α
```

JANA MURPHY - ADVERSE

```
-- a tree fell across the channel?
 1
    Q
 2
         That's what I wrote.
    Α
 3
         And that's upstream of the biofilter.
 4
         Yes.
 5
         And --
 6
             MR. CASSIDY: Your Honor, this may be a good
   point to break.
 8
             THE COURT: It is. We'll resume at 12:45 --
9
    no, 1:45.
10
             MR. CASSIDY: Thank you, Your Honor.
11
         (Recess at 12:15 p.m.)
12
13
14
            I, LYNETTE SWENSON, Certified Realtime and Merit
    Reporter in and for the State of Wisconsin, certify that
15
    the foregoing is a true and accurate record of the
    proceedings held on the 22nd day of May 2012 before the
16
   Honorable Barbara B. Crabb, District Judge, for the
    Western District of Wisconsin, in my presence and
17
   reduced to writing in accordance with my stenographic
    notes made at said time and place.
    Dated this 8th day of September 2011.
18
19
20
                          /s/_
21
                           Lynette Swenson, CRR, RMR, CBC
                               Federal Court Reporter
22
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